

INSTITUTIONAL INFLUENCE ON THE MANIFESTATION OF
ENTREPRENEURIAL ORIENTATION:
A CASE OF SOCIAL INVESTMENT FUNDERS

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DEDICATION

For my very best boy, Blessing. Your spirit will continue to guide me throughout my life.

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Since I came by myself from Japan to the United States—a nation with a rich tradition of philanthropy, my life has been filled with many challenges, yet with numerous episodes of people’s generosity as well. The biggest lesson I learned during my work for fundraising at Carnegie Hall and WNET New York is to thank those people for their unconditional support and to never take it for granted. As such, I will here express my deepest gratitude to those who helped bring this dissertation to completion.

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As institutional theory suggests, my mission originating this dissertation research has been shaped by the institution in which I am most profoundly embedded—my family. My mother Yoshiko has equipped me with critical principles in life: every individual has a right to pursue his/her dream although it may be against social norms; always thank others for what they have done for me and society; and treat anybody fairly regardless of social and economic statuses. I recalled that she always offered a help to underprivileged children in our neighborhood—as I often sat with them to do my homework! My sister Michiru, whom I adore more than she can imagine, persuaded my father who was initially reluctant to let me study abroad when I was accepted by Columbia University. Without her backing, I would not be able to continue my career in the United States.

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There are several beings that no longer exist on earth, but that enlightened me how deeply philanthropy is rooted in human values. Victims of the 9/11 attacks—the tragedy in which I happened to be involved when our president at WNET urged all staff members to volunteer—empowered me to discover my own entrepreneurial capacity when I organized a volunteer group assisting their families; as being trained to be a classical pianist, I had never done this sort of thing till then. This experience also made me realize that data of victims were not about numbers, but about a life unique to each special being. My grandmother Masae, who raised my father single-handedly as a war widow and small business owner, has left a testament to how an individual could be entrepreneurial despite very limited resources. My father Yoshihiro was an Olympian later becoming a corporate executive, who also actively supported young athletes. During and after his funeral, I learned from many his employees that he avoided massive layoffs during Japan’s depression by cutting his own salary and benefits: His life demonstrated to me that business and philanthropy could harmonize in a remarkable manner. Finally, my very best boy Blessing, who passed away unexpectedly right before our moving to Greensboro: You came to my life in its prime, and always supported me later during my darkest times. As I kept telling you, I would not be alive without you. I am not really sure how I am still here, honestly. But, one thing I am very certain about is that you have kept, and will continue to keep, me grounded and focused in pursuit of my life mission. For this very reason, this dissertation is dedicated to you.

ABSTRACT

Tamaki Onishi

INSTITUTIONAL INFLUENCE ON THE MANIFESTATION OF ENTREPRENEURIAL ORIENTATION: A CASE OF SOCIAL INVESTMENT FUNDERS

Linking the new institutionalism to entrepreneurial orientation (EO), my dissertation investigates institutional forces and entrepreneurial forces—two contradicting types of forces—as main effects and moderating effects upon practices and performance of organizations embedded in the institutional duality. The case chosen observes unique hybrid funders that this study collectively calls *social investment funders* (SIF), which integrate philanthropy and venture capital investment to create and implement a venture philanthropy model for a pursuit of their mission. A theoretical framework is developed to propose regulative and normative pressures from two dominant institutions governing SIFs. Original data collected from 146 organizations are scrutinized by moderated multiple regressions for two empirical studies: Study 1 for effects on SIFs’ venture philanthropy practices, and Study 2 for effects on SIFs’ social and financial performance. Multiple imputations, diagnostic analyses, and several post hoc analyses are also conducted for robustness of data and results from multiple regression analyses.

Results from these analyses find that EO and venture capital institutional forces both enhance SIFs’ venture philanthropy practices. A hypothesis postulated for a negative relationship between the nonprofit status and venture philanthropy practices is also supported. Results from moderated regression analyses, along with a subgroup and EO subdimension analyses, confirm a moderating effect between EO and the nonprofit

status, i.e., a regulative institutional pressure. A positive relationship is found in EO-financial performance, but not in EO-social performance. While support is lent to hypotheses posited for a social/financial performance relationship with donors'/investors' demand for social outcomes, and with the management team's training in business, the overall results remain mixed for Study 2. Nonetheless, this dissertation appears to be the first study to theorize and test EO as a micro-level condition enabling organizations to strategically shape and resist institutional pressures, and it reinforces that organizations' behavior is not merely a product of their passive conformity to environmental forces, but of the agency, also. As such, this study aims to contribute to scholarly efforts by the "agency camp" of the new institutionalism and EO, answering a call from the leading scholars of both EO (Miller) and the new institutionalism (Oliver).

Wolfgang Bielefeld, Ph.D., Chair

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CHAPTER 1: INTRODUCTION

Chapter 1 presents an overview of this dissertation by explaining research backgrounds, objectives, questions and contributions. Pertinent prior literature is reviewed to identify theoretical gaps in institutional theory and entrepreneurial orientation (EO). The present chapter concludes with summarizing the structure of this dissertation.

Overview

The last decade has witnessed substantial developments in research on social entrepreneurship. A recent study found that its sample of 152 articles on social entrepreneurship showed an increase in publication rate of 750 percent over the 18-year time span (Short, Moss, & Lumpkin, 2009). Despite many conceptual and methodological issues, including a lack of agreement on major aspects such as a clear definition as well as difficulty measuring performance, this emerging field bears significant opportunities for theory development (Austin, 2006; Bielefeld, 2009; Mair & Martí, 2006; Mort, Weerawardena, & Carnegie, 2003; Nicholls, 2010; Peredo & McLean, 2006; Zahra, Gedajlovic, Neubaum, & Shulman, 2009). The complexity of organizational legal status and structure (nonprofit, for-profit, or a hybrid of both) and the duality of goals and orientation (social and financial) challenge our conventional understanding about theories that have been tested and established. Indeed, the number of theory-grounded studies about social entrepreneurship is rapidly increasing. As shown in Table 1.1, those studies apply a wide range of theoretical perspectives to analyses, ranging from economics and market failure (Cohen & Winn, 2007; Dean & McMullen,

2007) and organizational identity (Grimes, 2010; Miller & Wesley, 2010) to bricolage¹ (Di Domenico, Haugh, & Tracey, 2010), institutional logics and theory (Battilana & Dorado, 2010; Moody, 2008; Townsend & Hart, 2008), and the resource-based view (Meyskens, Robb-Post, Stamp, Carsrud, & Reynolds, 2010).

My dissertation aims to follow these theory-grounded efforts advancing social entrepreneurship research by combining two theoretical perspectives, namely, the new institutionalism (DiMaggio & Powell, 1983; Scott, 2008a) and entrepreneurial orientation (EO) (Covin & Slevin, 1989; Miller & Friesen, 1978; Miller, 1983). My approach originates from theoretical gaps identified by Oliver (1991), which I will discuss in more detail in the following section. In sum, the gaps lie at the heart of the “structure versus agency debate”—the most central quarrel dividing institutionalists (Hirsch & Lounsbury, 1997). That is, institutional theorists have been involved in heated discussions over whether organizational behavior is primarily the product of macro social forces or of organizational agency. Although the agency arguments offers a meaningful premise of advancing institutional theory, the term “institutional” is still more likely to be associated with “structure” (Scott, 2008a), and as a result, the bulk of the research efforts in the institutional theory tradition is concentrated on tests of structure rather than agency (Heugens & Lander, 2009).

To fill the important gaps identified to advance institutional theory, my dissertation takes the “agency” position in the new institutionalism by linking institutional theory to EO. A traditional “structure” position in the new institutionalism

¹ It should be noted that a concept of “bricolage,” which originates from Lévi-Strauss's (1966) work describing it as “making do with whatever is at hand,” has been applied as “entrepreneurial bricolage” to entrepreneurship literature. Baker and Nelson (2005) have developed a formal definition of entrepreneurial bricolage proposed a process model of bricolage and firm growth.

emphasizes how organizational behaviors and structures are shaped by institutional forces that reinforce stability and conformity. In contrast, the literature on entrepreneurship tends to call attention to how organizational behaviors and institutions themselves are shaped by creative entrepreneurial forces that bring about change. The juxtaposition of these contradictory forces has stirred a tension, yet it has also opened a new promising research avenue for “institutional entrepreneurship” (DiMaggio, 1988). Scott (1987) first proposed that institutional arguments alone are insufficient to fully explain organizational behaviors and are perhaps better positioned as complementary. The importance of the approach I am taking has been fervently stressed (Garud, Hardy & Maguire, 2007), as it will advance institutional theory. Linking EO with institutional theory does not serve only the interests of institutional theorists. In a recent Special Issue of *Entrepreneurship Theory and Practice* about EO, Miller (2011) suggested that EO scholars explore using institutional theory for their EO research because combining these theoretical domains will serve well to contribute to useful EO theory development. Miller’s comment reflects the fact that institutional theory may have not received worthy attention from EO scholars to date, with a few exceptions (e.g. Tang, Tang, Marino, Zhang, & Li, 2008), which usually examine EO against government policies and infrastructures in the international context (e.g., China).

In my dissertation, institutional forces and entrepreneurial forces are investigated as main effects and interaction effects upon (1) organizations’ practices, and (2) their performance. In so doing, I examine how institutional forces and entrepreneurial forces affect organizational practices and performance both individually and jointly by using moderated multiple regression analyses. Some post hoc analyses and multiple imputation

analyses are conducted for the robustness of the results and data. To pursue my inquiry, the empirical context selected for this study is unique hybrid funders (Young, 2007) for social entrepreneurs, which are often called “venture philanthropy foundations” (Fleishman, 2009) or “social venture capital funds” (Clark & Gaillard, 2003; Miller & Wesley, 2010). This study collectively calls them *social investment funders (SIFs)* that adopt and adapt a for-profit venture capital model (Tyebjee & Bruno, 1984) for philanthropic purposes, which resulted in creating an unconventional model called a venture philanthropy funding model (Brainerd, 1999; Frumkin, 2008; Letts, Ryan, & Grossman, 1997). As discussed in more detail below, the idea of venture philanthropy has arguably gotten the greatest attention in the field of nonprofit and philanthropic studies over the past decade (Frumkin, 2008); nonetheless, very limited scholarly efforts have been made to investigate this topic (Moody, 2008) primarily due to a lack of systematic data for analysis (Van Slyke & Newman, 2006).

Given these backgrounds, my objectives in this study are two-fold. First, I hope to fill theoretical gaps identified in the new institutionalism literature and the EO literature, and to expand theoretical implications of these two domains. These theoretical gaps will be detailed below in the literature review section. My second, and perhaps the most fundamental, objective answers a call from my fellow nonprofit and philanthropic scholars (Dees, 1998; Van Slyke & Newman, 2006). My objective is to help advance more scholarly theory-grounded efforts to understand unique phenomena of social entrepreneurship and venture philanthropy. To conduct this empirical study, I collected systematic data and analyzed them through hypothesis testing by moderated multiple regression. This methodological approach distinguishes my study from the majority of

the theory-grounded studies listed in Table 1.1, which generally take an exploratory and qualitative approach. A use of qualitative methods should be justified, considering that the field of social entrepreneurship is still in its infancy and thus offers a prime opportunity for theory development through employing rich qualitative methods (Dart, 2004; Kistruck & Beamish, 2010; Peredo & Chrisman, 2006). Nevertheless, the time seems ripe for embarking on a next stage. The recent study by Short and his co-authors (2009) succinctly summarizes the present state and future directions of our collective efforts to advance the social entrepreneurship field:

Based on our review of conceptual social entrepreneurship articles, we believe that scholarly progress in social entrepreneurship research will not accelerate until theoretical relationships become more explicit, reflecting Cummings' (2007) statement that legitimacy can be gained when research questions are principally theory driven, and data gathering and analytical methods are chiefly quantitative (Short et al., 2009, p. 166).

This statement underscores that quantitative analysis with theory testing is critical to further advance social entrepreneurship. My dissertation aims also to meet this call by a triangular method involving hypothesis testing by quantitative analyses. Now, let us move to the literature review to identify gaps addressed in this empirical study.

Table 1.1. Selected Theory-Grounded Studies about Social Entrepreneurship

Author (Year)	Theoretical perspectives	Sample	Methodology	Findings
Battilana & Dorado (2010)	Institutional logics	2 pioneering commercial microfinance organizations	Case study	<ul style="list-style-type: none">• A lack of institutional logic plurality forces hybrid organizations to develop a common organizational identity that enables organization members to strike a balance between logics so as to maintain their hybridity.
Cohen & Winn (2007)	Market failure	N/A	Theory paper	<ul style="list-style-type: none">• Sustainable entrepreneurship arises from market imperfections that have contributed to environmental degradation: (1) firms are not perfectly efficient; (2) externalities exist; (3) pricing mechanisms work imperfectly; and (4) information is not perfectly distributed.
Dean & McMullen (2007)	Market failure	N/A	Theory paper	<ul style="list-style-type: none">• Environmentally relevant market failures provide opportunities for achieving profitability while simultaneously reducing environmentally degrading economic behaviors.
Di Domenico, Haugh & Tracey (2010)	Bricolage	8 social enterprises in U.K.	Case study	<ul style="list-style-type: none">• Social enterprises acquire resources in resource-scarce environments through social bricolage, which is based on the constructs of social value creation, stakeholder participation, and persuasion.
Grimes (2010)	Organizational identity and sense making	6 organizations with different geographies and service mixes	Case study	<ul style="list-style-type: none">• Social organizations employ performance measurement as a tool for making sense of social entrepreneurship as an organizational identity, and their relationship with funders varies in terms of how they use performance measurements as a sense-making tool to establish their organizational identities.

Table 1.1. (cont.)

Author (Year)	Theoretical perspectives	Sample	Methodology	Findings
Meyskens, Robb-Post, Stamp, Carsrud & Reynolds (2010)	Resource-based view	70 social entrepreneurs in economic development and education	Content analysis and correlation analysis	<ul style="list-style-type: none">• Not only commercial but also social entrepreneurs rely on interlinked resources to create value, as shown by the positive and significant relationship between innovativeness, financial capital, and partnerships, and that between knowledge transferability and innovativeness.
Miller & Wesley (2010)	Organizational identity	44 social venture capitalists	Hierarchical linear regression	<ul style="list-style-type: none">• The dual identity of social ventures in the social and entrepreneurship sectors prompts their funders, social venture capitalists, to assess their investment decision based on criteria drawn from both sectors.
Moody (2008)	Institutional theory and field construction	13 organizational leaders in venture philanthropy	Exploratory	<ul style="list-style-type: none">• The construction and diffusion of the venture philanthropy field depended on opinion leaders who strategically defined, legitimated, and advocated the new model. Implementation difficulties and the for-profit/nonprofit culture clash also affected the evolution of the field.
Moss, Short, Payne & Lumpkin (2011)	Organizational identity	118 winners of awards by <i>FastCompany</i> and the Skoll Foundation	Content analysis	<ul style="list-style-type: none">• Sample social ventures exhibit dual identities: a utilitarian organizational identity (i.e., entrepreneurial, product oriented) and a normative organizational identity (i.e., social, people oriented)—and show a greater normative identity relative to mainstream for-profit ventures.
Townsend & Hart (2008)	Institutional theory	N/A	Theory paper	<ul style="list-style-type: none">• Founder perceptions of an ambiguous institutional environment are leading to the variance in choice of organizational form for social entrepreneurial ventures.

Gaps in Literature

Agency Perspectives in the New Institutionalism: Organizations' Strategic Responses to Environmental Pressures

Institutional theory adopts an open system perspective: Organizations are strongly influenced by the environment surrounding them. Whereas the “old” institutional theory focuses on the role of habit, issues of influence, competing values, power and informal structures (Parsons, 1960; Selznick, 1949, 1957), the “new” institutional theory² highlights the cognitive aspect of institutions, legitimacy, and embeddedness of organizational fields as the central issues (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Zucker, 1988). As such, the new institutionalism dictates that legitimacy and social acceptability are critical for organizations to survive and thrive in their social environment (Scott, Ruef, Mendel, & Caronna, 2000). Legitimacy³ here is regarded as a “generated perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995, p. 574). To gain legitimacy, organizations must comply with demands from their institutions, which are “composed of regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life” (Scott, 2008a, p. 48).

² Scholars (e.g., DiMaggio & Powell, 1991a; Greenwood, Suddaby, & Hinings, 2002; Scott, 2008) often distinguish the “new institutionalism” from the “old” institutionalism, while there is a criticism of this distinction (e.g., Selznick, 1996). In the old institutionalism, issues of influence, coalitions, and competing values are central, along with power and informal structure. This focus contrasts with the new institutionalism with its emphasis on legitimacy, the embeddedness of organizational fields, and the centrality of classification, routines, scripts, and schema (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). The current study bases its discussions on the new institutional perspective unless otherwise noted.

³ It should be noted that different theories define “legitimacy” differently. For instance, resource dependence theory (Pfeffer & Salancik, 1978) views legitimacy as another kind of resource for organizations. The present study follows the definitions by new institutional theory.

As a result, conformity to the external constraints presses organizations toward “institutional isomorphism”(DiMaggio & Powell, 1983)—processes that lead organizations in a specific organizational field to become homogeneous to one another over time in search of legitimacy. Institutional isomorphism occurs through any of three pressures: (1) coercive isomorphism (in which organizations are pressured to adopt rules from other organizations they are dependent upon); (2) mimetic isomorphism (in which one organization mimics another successful organization in the face of uncertainty); and (3) normative isomorphism (in which increased professionalization presses organizations to adopt same, appropriate methods) (DiMaggio & Powell, 1983; Tolbert & Zucker, 1983). According to DiMaggio and Powell (1983), such inter-organizational homogeneity is the logical end state for all organizations occupying increasingly professionalized and “structured” (Giddens, 1984) fields where an increase in the amount of interactions among organizations leads to the development of particular structures reflecting their shared self-definition.

Hence, the effects of the institutional environment on structural conformity and isomorphism have long been the “master hypothesis” of the structuralist camp in the new institutionalism (Heugens & Lander, 2009). Notwithstanding its current status as one of the leading perspectives in organizational analysis (Mizruchi & Fein, 1999), the new institutionalism has also been a frequent target of criticism due to its assumption about organizational passivity and its failure to adequately address an organization’s possible strategic behavior and response to influence the process of institutionalization (Covaleski & Dirsmith, 1988; Dacin, Goodstein, & Scott, 2002; DiMaggio, 1988; Hirsch, 1997; Powell, 1985).

In 1988, DiMaggio offered an important implication about the “agency” view of the new institutionalism: “new institutions arise when organized actors with sufficient resources see in them an opportunity to realize interests that they value highly” (DiMaggio, 1988, p. 14). However, Oliver's study (1991) first laid out a systematic set of the counterhypotheses arguing that an organization can indeed be an active player in organization-environment relations and also be capable of employing a broad range of strategic behaviors responding to the institutional environment that affects it. There are five types of strategic behaviors that organizations may enact in response to institutional pressures toward conformity. These strategic behaviors vary from passivity to increasing active resistance: (1) acquiescence (mimicking models and obeying rules); (2) compromise (balancing multiple expectations and negotiating with stakeholders); (3) avoidance (buffering and loosening institutional attachments and changing goals); (4) defiance (ignoring or contesting rules, requirements and norms); and (5) manipulation (shaping values and controlling institutional processes).

According to Oliver (1991), how organizations respond to institutional pressures depends on their willingness, capacity and resources, i.e., the micro-based organizational factors, along with other institutional antecedents. As such, Oliver (1991) hypothesized organizational responses to institutional pressures toward conformity, based on five conditions: (1) cause (why institutional pressures are being exerted); (2) constituents (who is exerting these institutional pressures); (3) content (what these pressures are); (4) control (how or by what means these institutional pressures are exerted); and (5) context (where they occur).

Today, this “structure (conformity) versus agency (strategic responses) debate” is discussed as the most central quarrel dividing institutionalists (Hirsch & Lounsbury, 1997). The primary question is about whether organizational behavior is the product of macro social forces or of organizational agency. In Oliver's view (1991), organizations experience differing degrees of discretion in responding to institutional pressures. Increased institutionalization can in fact become a source of deviant, autonomous, and entrepreneurial behaviors in their own rights (“institutional entrepreneurship,” DiMaggio, 1988). That is, it is argued that institutional pressures actually promote organizations to assume entrepreneurial behaviors, which then shape institutional processes.

Being invoked by Oliver's argument, other scholars began theoretically exploring the agency perspective in the new institutionalism (Greenwood & Hinings, 1996; Hoffman, 1999; Washington & Ventresca, 2004). These foundation studies resulted in the increasing number of empirical studies exploring this line of research (Holm, 1995; Rao, Davis, & Ward, 2000). Today, we have some empirical insights about what conditions may trigger organizations' resistance against environmental constraints. For example, institutionalization is a product of “interaction rituals” that work to distribute power differentially within fields and consequently engender strategies of resistance on the part of those not privileged by existing conditions (Lawrence, 2004). Zilber's (2002) ethnographic study reveals that the roles of organization members work as carriers of institutions and their agency in infusing actions with meanings through interpretation. Ongoing field-level institutionalization is also likely to give rise to endogenous pressures for change. The underlying mechanism confirms that increasingly strict isomorphic pressures progressively reduce the adaptive flexibility of institutions, and this condition

in turn makes them more vulnerable to exogenous resistances and shocks (Schneiberg, 2005). To date, many studies (Child, Lu, & Tsai, 2007; Greenwood, Suddaby, & Hinings, 2002; Holm, 1995) have been focusing on field-level conditions enabling organizations' response to influence institutional constraints.

Notwithstanding a significant contribution that these studies have made to advance the new institutionalism (Heugens & Lander, 2009), the main focus of most prior studies remains on organizations' deviant and entrepreneurial behaviors at the "field" level. In other words, resistance and deviance are examined as collective actions by a group of organizations, rather than idiosyncratic actions by an individual organization. What is lacking here is an attention to the "organizational-level" conditions, i.e., the attributes of organizations, answering a question about why some organizations take a strategic response to institutional pressures while other organizations do not, even within the same institutional field. Research on strategic responses of organizations at the macro level does not adequately rise to a fundamental claim about organizations' agentic, entrepreneurial, and strategic actions against institutional pressures, which Oliver (1991) advocated in her seminar work. It is still not well understood whether the level of entrepreneurship in individuals or organizations can be a determinant of organizational strategic responses to institutional pressures. My empirical study is poised to fill this gap in the new institutionalism.

The Paradox of Embedded Agency: Linking the New Institutionalism to Entrepreneurship Research

Master hypotheses of institutional theory and entrepreneurship⁴ contrast with each other. As reviewed above, the literature of the new institutionalism has traditionally focused on stability of the field and passive conformity of organizations to environments, although it increasingly acknowledges the importance of change⁵ (Dacin et al., 2002; Greenwood & Hinings, 1993). Legitimacy is more important than effectiveness from the institutional theory perspective. In contrast, the literature on entrepreneurship highlights change through the processes of discovery, evaluation and exploitation of opportunities (Shane & Venkataraman, 2000) and effectiveness and efficiency are venerated (Barley & Tolbert, 1997). Despite the contrast between these two theories, the juxtaposing of institutional and entrepreneurial literature can offer considerable promise for understanding how and why certain entrepreneurial organizing actions come into existence in the face of institutional constraints (Garud et al., 2007). An inquiry that reintroduces agency, interests, and power into institutional analyses of organizations has today led to a dramatic growth of a new research agenda⁶, “institutional entrepreneurship” (Battilana, Leca, & Boxenbaum, 2009; Child et al., 2007; Dorado, 2005; Garud, Jain, & Kumaraswamy, 2002; Garud et al., 2002; Greenwood & Suddaby,

⁴ It should be noted here that my use of the term *entrepreneurship* is very general. EO scholars, such as Lumpkin and Dess (1996) distinguish a firm's EO or entrepreneurial processes, from entrepreneurship, which is often defined as new entry. Lumpkin and Dess (1996) said “new entry explains what entrepreneurship consists of, and entrepreneurial orientation describes how new entry is undertaken” (p. 136).

⁵ It should also be noted that work by the “old” institutional theory (Selznick, 1949, 1957) accounted for actors' agency, while the new institutional theory tends to overlook the role of actors in institutional change.

⁶ Although DiMaggio (1988) has been credited with the foundational work for the notion of institutional entrepreneurship, Leca, Battilana, & Boxenbaum (2008a) cite Eisenstadt (1980) as the first to use the notion of institutional entrepreneurship to characterize actors who serve as catalysts for structural change and take the lead in being the impetus for, and giving direction to, change.

2006; Khan, Munir, & Willmott, 2007; Lawrence & Phillips, 2004; Leca, Battilana, & Boxenbaum, 2008; Leca & Naccache, 2006; Lounsbury, 2007; Maguire, Hardy, & Lawrence, 2004; Tracey, Phillips, & Jarvis, 2011; Wijen & Ansari, 2007; Zilber, 2007). In sum, institutional entrepreneurs serve as “agents of legitimacy supporting the creation of institutions that they deem to be appropriate and aligned with their interests. These agents have the resources and hence the power to shape the character of institutions and institutional change” (Dacin et al., 2002, p. 47).

My effort to link institutional theory to entrepreneurship echoes the heated debates among institutional entrepreneurship scholars over “the paradox of embedded agency” (Battilana & D’unno, 2009; DiMaggio & Powell, 1991b; Friedland & Alford, 1991; Hardy & Maguire, 2008; Holm, 1995; Leca & Naccache, 2006; Mair & Martí, 2006; Mutch, 2007; Seo & Creed, 2002; Sewell, 1992; Uzzi, 2001). The debates have brought a challenge to the very principle of the new institutionalism because it traditionally views institutions as the source of stability (Scott, 2008a). The notion of institutional entrepreneurship runs against this traditional view shared among institutional scholars. The primary question is: if actors are embedded in an institutional field and are substantially shaped by regulative, normative and cognitive pressures that structure their cognitions, how can they envision change and enact new practices in the contexts in which they are embedded? (Greenwood & Suddaby, 2006) Resolving this paradox is a key challenge to the formulation of theoretical foundations for the study of institutional entrepreneurship.

To answer this, many organizational studies have been published. Yet, most literature on institutional entrepreneurship investigates the field-level conditions that

prompt institutional entrepreneurship. Research that accounts for institutional entrepreneurship at the micro and individual level remains very limited (Battilana et al., 2009). Still, the limited literature about institutional entrepreneurship at a micro level informs us about individual-level conditions enabling institutional entrepreneurship. Such conditions include actors' sensemaking strategies (Dorado, 2005), partial autonomy from the institution (Seo & Creed, 2002), an entrepreneur's ability to abstract from the concerns of others and to take an autonomous reflexive stance (Mutch, 2007), and empathy and social skills to provide other actors with reasons to cooperate (Fligstein, 1997, 2001). Despite their contribution, there is still very limited understanding about how entrepreneurial forces urge organizations to execute a novel action to resist institutional forces.

Entrepreneurship scholars, too, have begun actively applying institutional theory to their studies, due to the dissatisfaction with theories that tend to ignore the social and institutional forces and structural configurations that shape organizational actions (Aldrich & Ruef, 2006; Bruton, Ahlstrom, & Li, 2010; Lounsbury & Crumley, 2007). A recent study by Bruton and his co-authors (2010) states that institutional theory has become a major theoretical lens for entrepreneurship research since Shane and Foo's (1999) application of institutional theory to investigate the survival of franchisors. The authors also surveyed existing entrepreneurial articles that employed institutional theory and identified three major streams of research: (1) institutional setting, (2) legitimacy, and (3) institutional entrepreneurship.

A review by Bruton and his co-authors (2010) reveals that the majority—seemingly in a disproportionately larger number than in case in sociology and other

organizational studies—of entrepreneurship research has utilized institutional theory for comparative international research typically between emerging and transitional economies (e.g., China, Eastern Europe, Russia) and mature market economies (e.g., the United States) (Bruton, Ahlstrom, & Obloj, 2008; Busenitz, Gómez, & Spencer, 2000; Manolova, Eunni, & Gyoshev, 2008; Zacharakis, McMullen, & Shepherd, 2007). Scott's "three pillar" frame (2008) is often introduced as a theoretical model to examine varying rules, norms, and beliefs that influence organizations across countries and cultures. By using the three pillar frame addressing regulative, normative and cultural-cognitive forces from institutional fields, scholars strive to find out what institutional environment enables and constrains entrepreneurial activities in the environment in question (Ahlstrom & Bruton, 2010; Bruton & Ahlstrom, 2003; Peng, 2004; Peng, Yamakawa, & Lee, 2010). As such, actively explored research agendas include investigating how the institutional factors, such as government regulations, define, promote or limit entrepreneurial opportunities and venture capital practices, and how they affect the rate and size of new venture creation (Bruton, Ahlstrom, & Singh, 2002); and what are legitimacy-building strategies in different countries and how do they affect entrepreneurial actions there (Ahlstrom, Bruton, & Yeh, 2008). In their studies about institutional influences, most entrepreneurship scholars also tend to focus on impacts of "institutional void" (Hajer, 2003; Miller, Lee, Chang, & Le Breton-Miller, 2009)—the situation where institutional infrastructures are inadequate, weak or non-existent—upon entrepreneurial activities and how entrepreneurs manage to create ventures in the condition that lacks institutional infrastructure (often by forming informal ties and relational governance).

These studies have dramatically advanced our understanding of entrepreneurial activities from an international and broader perspective. Nonetheless, their findings are still somehow disconnected from Oliver's (1991) hypotheses. That is, without going deeper into the micro level to examine the relationship between the level of entrepreneurial posture of individual organizations, rather than a group of organizations, and their strategic responses to institutional environments, we still do not know how entrepreneurial forces of organizations shape and respond to institutions in a distinct and strategic manner—the central quarrel raised amid the “structure versus agency debate” (Heugens & Lander, 2009). The micro-level research will also help answer a subsequent, yet perhaps more intriguing, question for entrepreneurship scholars, about how institutionally embedded actors can enact strategic behaviors and resist pressures from the very institutions in which they are embedded (Garud et al., 2007).

Bruton and his co-authors (2010) are actually aware of this unfilled gap in entrepreneurship research and acknowledge that entrepreneurship scholars have typically used institutions as macro-level variables. According to them, micro-level research will open a new, meaningful avenue of entrepreneurship research. Wicks' (2001) study reminds us that institutional theory could also be a micro-level variable impacting individual behavior. While I also use Scott's three-pillar typology as a theoretical construct for my study, what distinguishes it from prior studies lies in this micro-level inquiry about interactions between entrepreneurial and institutional forces. Whereas the prior entrepreneurship literature tends to take the structuralists' position and is typically interested in trajectories of entrepreneurial behaviors shaped by institutional forces at the macro level (e.g., a rate of venture creations), my study takes the agency position and

views entrepreneurship as a factor shaping the impact of institutional forces on organizational practices and processes at the micro level. Toward this end, I argue that EO is a factor enabling organizations to resist institutional constraints, empowering them to employ unconventional practices and enhance performance.

EO in the Institutional Environment: Moderating Effects Between EO and Institutional Pressures

EO is an organization-level construct (Covin & Slevin, 1991) that refers to an organization's processes, practices, and decision-making proclivity favoring entrepreneurial activities (Covin & Wales, 2012; Lumpkin & Dess, 1996). EO generally is conceptualized in two different ways: as the unidimensional construct constituted by innovativeness, proactiveness, and risk taking (Covin & Slevin, 1989; Miller, 1983); or as the multidimensional construct representing five dimensions: innovativeness, proactiveness, risk taking, autonomy, and/or competitive aggressiveness (Lumpkin & Dess, 1996). EO consists of sustained behavioral patterns reflecting any or all of those dimensions (Covin & Lumpkin, 2011).

EO has become a central concept in the domain of entrepreneurship and has received substantial amounts of theoretical and empirical attention (Covin, Green, & Slevin, 2006; Rauch, Wiklund, Lumpkin, & Frese, 2009). The ultimate dependent variable in EO research is organizational performance (Covin & Slevin, 1991). Hence, the EO-performance relationship became the major focus in EO research and a considerable amount of knowledge regarding it has been accumulated to date. Many prior studies found EO improves organizational performance (Lee, Lee, & Pennings,

2001; Wiklund & Shepherd, 2003; Wiklund, 1999; Zahra & Covin, 1995), while scholars also concluded that the empirical results are somewhat mixed (Lyon, Lumpkin, & Dess, 2000; Rauch et al., 2009). Covin, Slevin and Schultz (1994) and Smart and Conant (2011) were unable to find a significant relationship between EO and performance.

In addition to performance, EO has been linked to other variables (Covin & Slevin, 1991). For instance, EO is positively related to organizations' acquisitive and experimental learning (Kreiser, 2011); strategic learning capability (Anderson, Covin, & Slevin, 2009); strategic reactivity (Green, Covin, & Slevin, 2008); and organizational capability of knowledge management and effectiveness (Lee & Sukoco, 2007).

In part searching for a better explanation for mixed empirical results (Wiklund & Shepherd, 2003), EO scholars have empirically explored the contingent relationship between EO and moderators. This effort also aligns with the comment from Covin and Slevin (1991) and Lumpkin and Dess (1996) that the performance implications of EO are context-specific and thus models should incorporate contingency or moderating effects. That is, the strength of the relationship between EO and performance depends on the characteristics of the external environment and internal organizational characteristics (Wiklund & Shepherd, 2005). This further implies that the relationship between EO and performance may be more complex than a simple main-effects-only relationship and may be better understood through a configurational approach (Dess, Lumpkin, & Covin, 1997; Lumpkin & Dess, 1996).

As a result, a variety of moderators for the EO-performance relationship have been discussed and tested (Lumpkin & Dess, 1996; Zahra & Covin, 1995; Zahra & Garvis, 2000). Moderators identified include internal variables, such as knowledge-based

resources (Wiklund & Shepherd, 2003), strategies (cost leadership, marketing differentiation, and innovative differentiation) (Dess et al., 1997), and cultural diversity in management (Richard, Barnett, Dwyer, & Chadwick, 2004); and external variables, such as inter-organizational network and social capital (network centrality and bridging ties, Stam & Elfring, 2008). As Covin and Slevin (1991) stress that inclusion of environmental variables in the model is critical in EO research, environmental variables are the most actively explored moderator for EO. Therein, EO scholars have extensively investigated the environment-organization relations (Covin & Covin, 1990; Covin, Slevin, & Schultz, 1997; Covin & Slevin, 1989; Dess et al., 1997) to the point that “much of the value added from these lines of research has now been realized” (Covin & Lumpkin, 2011, p. 865).

A review of the literature on both institutional theory and EO, therefore, reveals that these theoretical domains both have long explored the environment-organization relations. Yet, the central premises of institutional theory and EO propose the contrasting organizational processes. Contrary to the traditional view of the new institutionalism, which assumes organizational passiveness and incapacity to respond to and shape the environment, the central premise of EO is organizational capacity to respond to and shape adverse circumstances. EO scholars assume that organizations are active players that “manipulate or change their environments by entering new markets, establishing new technologies, etc.” (Miller & Friesen, 1978, p. 12). Indeed in Miller's (1983) study, constraints arising from environmental heterogeneity, dynamism, and hostility are significantly and positively related to pioneering, innovation, and risk taking postures of

entrepreneurial organizations. Many other studies confirm this positive relationship between EO and performance (Covin & Slevin, 1989; Zahra & Covin, 1995).

It should be reminded that theoretical implication proposed by Miller and Friesen (1978) is very much in agreement with Oliver's agency views of organizations (1991). Herein, there is a logical connection of EO applied to institutional theory. At the same time, the nature of organization-environment relations still considerably differs between EO and institutional theory. Hence, there should still be some added value realized from the research juxtaposing these two theories. That is, whereas EO scholars conceive of organizations as independent from environments, institutional theorists conceive of organizations as deeply embedded in environments, which then affect organizational processes and cognitive abilities to envision and enact entrepreneurial actions. In other words, EO may play an even more critical role in enabling organizations to respond strategically to environmental constraints because organizations are embedded in these very institutional environments. In fact, in his recent article in a Special Issue of *Entrepreneurship Theory and Practice*, Miller recommended linking institutional theory to EO to "examine how the normative, political, and cognitive institutional environment may influence EO" (Miller, 2011, p. 881).

EO in Nonprofit and Social Entrepreneurship: Richer and More Complex

Manifestation of EO

Much of the research characterizing EO has focused primarily on for-profit firms. Yet in recent years, scholars have begun applying EO to organizations in the nonprofit sector and the public sector (Bhuian, Menguc, & Bell, 2005; Caruana, Ewing, &

Ramaseshan, 2002; Coombes, Morris, Allen, & Webb, 2011; Davis, Marino, Aaron, & Tolbert, 2011; Helm & Andersson, 2010; Morris & Jones, 1999; Morris & Joyce, 1998; Pearce, Fritz, & Davis, 2010). This growing trend of applying EO to the nonprofit context lies in the premise of offering a distinctive perspective on how EO manifests within the organizations whose primary goal is theorized as not maximizing profit, but rather maximizing the public good (Hansmann, 1980; Weisbrod, 1988). A common approach, therefore, is comparative research to test whether there is a noticeable difference between EO of nonprofits and for-profits (Cools & Vermeulen, 2008; Davis et al., 2011). According to Davis and his co-authors (2011), no significant difference exists with regard to a level of EO between nonprofits and for-profit.

Reflecting this growing position of EO in nonprofit and philanthropic studies, Morris, Webb and Franklin (2011) in their recent article have argued that although EO's key dimensionality in the nonprofit context may mirror the same dimensionality in the for-profit context, the dimensions should still be modified accordingly due to the different motives, processes, and outcomes of nonprofit behavior. Nonprofits' mission-driven motivation shapes their entrepreneurial processes and outcomes. As such, sub-dimensions of EO manifest in a more complex and multifaceted way. That is, (1) innovations are mission-centric, commercial, and/or a hybrid of both social and commercial aspects; (2) nonprofit organizations take social, financial, and/or stakeholder-relevant risks; and (3) they are proactive relative to similar organizations in terms of social and commercial innovation as well as relative to stakeholder expectations (Morris et al., 2011).

Morris and his co-authors (2011) have developed this theoretical framework clarifying a richer and more complex dimensionality of EO. Their theoretical framework suggests that the manifestation of EO can be dichotomous (social versus financial) in nonprofit and social entrepreneurship. One way to test this implication is to develop and empirically test items that tap each subdimension of nonprofit EO (Morris et al., 2011). Therein, two recent studies examined how EO affects social and financial performance of arts and culture nonprofits (Coombes et al., 2011) and religious organizations (Pearce et al., 2010). However, this line of research is still considerably slim.

Theory-Grounded Research on Venture Philanthropy and Social Investment

Venture philanthropy is often conceived as part of the movement toward adapting business concepts and practices for use in the nonprofit sector (Dart, 2004a, 2004b; Dees, 1998; Eikenberry & Kluver, 2004; Jegen, 1998). This very approach has prompted heated debates over advantages and disadvantages of using a venture philanthropy model in the nonprofit and philanthropic sector (Bishop & Green, 2010; Edwards, 2009, 2011). Proponents and opponents, however, both agree that venture philanthropy is one of the most prominent (yet the most controversial) innovations in philanthropic practice and no other idea for advancing the field of philanthropy has gotten more attention than venture philanthropy over the past decade (Frumkin, 2003). Despite a call from scholars (Van Slyke & Newman, 2006), venture philanthropy has been a rare subject for serious scholarly and theory-grounded research efforts. Drawing on institutional theory, Moody's exploratory study (2008) is credited with one of the first theory-grounded studies on venture philanthropy. He documented that a shift from traditional

philanthropic culture to business-like culture led to the development of a new organizational field for venture philanthropy.

Institutional theorists predict that increased communications and legitimacy-enhancing practices should develop isomorphism in organizational structures and behavioral patterns (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Contrary to this prediction, striking diversity still exists in the SIF institutional field. The legal structure of organizations ranges from public charities, private foundations and unincorporated voluntary groups, to quasi-governmental funds and limited liability corporations. Prior publications discuss a wide variety of organizations, including giving circles (e.g., Social Venture Partners), community foundations (e.g., the Peninsula Community Foundation recently merged into the new Silicon Valley Community Foundation), United Way, large and influential private foundations established by wealthy individuals (e.g., the Bill and Melinda Gates Foundation, Rockefeller Foundation), and nonprofit and for-profit “social venture capital” intermediary funds that work much like venture capital firms in raising “capital” and distributing it to a “portfolio” of organizations (e.g., Acumen Fund, the Omidyar Network) (Bishop & Green, 2010; Community Wealth Ventures, Inc., 2000, 2002; Eikenberry, 2006; Emerson, Wachowicz, & Chun, 2000; Fleishman, 2009; Frumkin, 2008; John, 2006; Moody, 2008; Scarlata & Alemany, 2008; Standlee, 2006).

A lack of homogeneity in the SIF field raises fundamental questions: What distinguishes SIFs from other organizations? In other words, why do some organizations decide to engage in venture philanthropy practices, while others do not? Nonprofit and philanthropic scholars have attempted to answer this question by examining internal characteristics of organizations (Anheier & Leat, 2006; Fleishman, 2009; Frumkin, 2008;

Hess, 2005; Letts et al., 1997; Prewitt, 2006a, 2006b) or external factors (Moody, 2008), but no definitive answers have been offered. A close look at the SIF field suggests that a descriptive or single-theory approach may not be sufficient to explain the diversity in the field, and a contingency approach is necessary.

This diversity also may be exemplified by the “institutional duality” (Kostova & Roth, 2002) in the SIF field, which was preceded by the traditional philanthropic field and the mainstream venture capital field (Moody, 2008). The duality of organizational identities of social ventures and their funders has recently been investigated and proven, and the findings assure that these organizations possess dual organizational identities and behave differently in accordance with their dominant identity (Miller & Wesley, 2010; Moss et al., 2011). Because organizational identity is socially constructed and appropriately conceived of as a set of identity claims, in reference to a specified set of institutionally standardized categories (Whetten & Mackey, 2002), it is logical to assume that the field of social entrepreneurship involves duality in the institutional environment as well as the organizational identity. The institutional duality of the SIF field then raises theoretically and empirically intriguing questions regarding why the diversity still exists in the field, including: What are dominant institutional fields for organizations to follow in order to decide whether or not to engage in venture philanthropy?

A Summary of Gaps Identified and Addressed by This Study

The extensive review of literature on the new institutionalism, entrepreneurship (nonprofit and philanthropy), and social entrepreneurship, has identified several important theoretical and methodological gaps. Table 1.2 illustrates these gaps. My

dissertation attempts to fill these gaps, and in so doing, it aims to make theoretical and methodological contributions to social entrepreneurship and philanthropic studies. As discussed above, a critical need for theory testing and development has been stressed to advance the field of social entrepreneurship (Short et al., 2009). Toward this end, my study addresses methodological gaps in social entrepreneurship by (1) grounding research in two major theories (institutional theory and EO), and (2) collecting and utilizing systematic data adequate for quantitative analysis testing hypotheses developed to examine theoretical relationships. My approach to fill theoretical gaps in social entrepreneurship also serves the need to fill theoretical gaps addressed by scholars in institutional theory and EO.

Table 1.2. Gaps Identified by Literature Review

Research domain	Gaps in the literature	Main references
New institutionalism	<ul style="list-style-type: none"> Organizations' agentic and strategic responses to institutional environments ("the agency view") 	Oliver (1991)
New institutionalism and entrepreneurship	<ul style="list-style-type: none"> Micro-level entrepreneurial conditions enabling organizations' strategic responses to institutional environments 	Battilana, Leca & Boxenbaum (2009); Bruton, Ahlstrom, & Li (2010)
EO	<ul style="list-style-type: none"> Regulative and normative impacts of institutional environments on EO (moderators) More complex dimensionality and manifestation of EO in nonprofits and social entrepreneurship (nonprofit contexts) 	Miller (2011) Morris, Webb & Franklin (2011)
Social entrepreneurship	<ul style="list-style-type: none"> Theory-driven, quantitative research with hypotheses testing and systematic data gathering/scrutiny 	Short, Moss & Lumpkin (2009)
Nonprofit and philanthropic studies	<ul style="list-style-type: none"> Theory-grounded research on venture philanthropy 	Dees (1998); Moody (2008); Van Slyke & Newman (2006)

Research Questions

The ultimate objective of my dissertation is to conduct an empirical study answering the central question raised from the agency-view of the new institutionalism: why some organizations strategically respond to and resist institutional constraints, while other organizations do not, even within the same institutional field? To expand theoretical implications of the agency view postulated by Oliver (1991), I argue that how organizations respond depends on a level of EO and institutional pressures arising from environments in which they are embedded.

The above question about the agency-view of the new institutionalism echoes the fundamental questions raised by philanthropic scholars to better understand phenomena of venture philanthropy: what distinguishes SIFs from other organizations? My empirical study develops a model to examine, build, and test models from a contingency perspective to answer the two guiding research questions:

1. *From perspectives of institutional theory and EO*: Do EO and/or institutional pressures independently affect practices and performance of organizations embedded in the dual institutions? (main effects); and
2. *From perspectives of the agency view of the new institutionalism and EO moderators*: Does EO enable organizations to resist institutional negative pressures and still engage in strategic practices and enhance performance despite institutional constraints? (moderating effects)

Structure of The Dissertation

This dissertation is structured as follows. In Chapter 2, I draw on philanthropic institutional theory and EO literature to establish the theoretical mechanisms of institutional forces in the SIF context, after which I proceed to develop the hypothesized relationships. This is followed by Chapter 3 in which I discuss the methodology used to test the relationships. Chapter 4 presents the results of the empirical tests of the hypotheses, where original data collected from 146 SIFs were analyzed by moderated multiple regressions along with several post hoc analyses. In Chapter 5, I discuss the results of each hypothesis, offer suggested areas for future research, and acknowledge the limitations of the study.

CHAPTER 2: THEORY AND HYPOTHESES

In this chapter, I link entrepreneurial orientation (EO) to the new institutionalism to develop theoretical models for two empirical studies: (1) Study 1 (effects on venture philanthropy practices); and (2) Study 2 (effects on social and financial performance).

A Typology of Institutional Pressures on Social Investment Funders

Any attempt to evaluate information to predict organizations' strategy and performance would depend significantly on the nature of the institution and institutional norms (Zacharakis et al., 2007). Hence, I must first specify what this study defines and investigates as institutional pressures shaping the practices and performance of SIFs.

Toward this, two questions must be answered: (1) What are dominant institutional fields, and (2) what are the sources of institutional pressures arising from those fields?

Dominant Institutional Fields Affecting SIFs

Institutions do not emerge in a vacuum: they always challenge, borrow from, and, to varying degrees, displace prior institutions (Scott, 2008a, p. 94). These prior institutions shape and construct an emerging field in terms of both formal institutional elements such as regulatory structures, professions, and public opinions (Oliver, 1991) and of informal elements such as language, physical artifacts, and beliefs (North, 2005). With this logic, the new field of SIFs must have been shaped and constructed by prior institutional fields.

Philanthropic scholars (Frumkin, 2008; Letts, Ryan, & Grossman, 1997; Moody, 2008) have identified the mainstream venture capital institution and the traditional philanthropic institution as the two prior institutional fields that have been shaping the SIF field. For instance, Letts, Ryan and Grossman's (1997) seminal article about the venture philanthropy movement reports that “some foundations have been studying venture capital firms and their techniques” (p. 35) to look for ways to improve upon traditional grantmaking. Moody's (2008) exploratory study on interview and publication data testifies how philanthropic-minded high-tech entrepreneurs have drawn on venture capitalists' principles and practices and how their adaptation of venture capitalism to philanthropy has shaped this emerging field for SIFs.

Through a theoretical lens of the new institutionalism, influences from venture capitalism and philanthropy can also be recognized in the way the SIF field emerged in the first place—by a naturalistic construction and by an agency-based construction (DiMaggio, 1988). The naturalistic construction (Berger & Luckmann, 2011; Schütz, 1967) began during the 1980s and 1990s when the neoconservatives' faith in market-based approaches arose. Subsequently, the primary wave of institutional creation for SIFs came during the “dot-com” era when high-tech entrepreneurs with accumulated wealth began entering into the philanthropic field (Moody, 2008). Institutional creation is driven by many “actors” and “opinion leaders” (Scott, 2008). “Diffusion” scholars of institutional theory (Galaskiewicz & Burt, 1991; Haunschild, 1993; Rogers, 1995) generally conceive of those “actors” and “opinion leaders” as those who work deliberately and diligently to construct the culture and promote a new field. The actors who have played a central role in creating and shaping the SIF field represent both the

venture capital and entrepreneurial community (e.g., venture capitalists, high-tech entrepreneurs, and corporate elites) and the philanthropic community (e.g., foundations and thought leaders). Notable examples in the venture capital community include George R. Roberts (one of the founding partners of KKR & Co. L.P. and the founder of REDF, which is the pioneer venture philanthropic fund in San Francisco), Bill Gates (the co-founder of Microsoft and of the Bill and Melinda Gates Foundation), and Jeffrey Skoll (the first president of eBay and the founder of the Skoll Foundation). Opinion leaders of the philanthropic field include influential foundations, such as the Rockefeller Foundation and the Kellogg Foundation (Standlee, 2006).

During the course of construction of the SIF field, however, the institutional duality (Kostova & Roth, 2002) has caused many cultural clashes with opinion leaders from each dominant field (Moody, 2008). The contrasting nature and logics between the mainstream venture capital field and the traditional philanthropic field created significant ambiguity in legitimacy. Whereas organizations facing uncertainty seek to mimic successful organizations in their own new field (DiMaggio & Powell, 1983), organizations facing ambiguity caused by the multiplicity of institutional logics seek to mimic old or longstanding organizations of the prior fields and to rely on well-established logics rather than emergent logics in a new field (Greenwood & Hinings, 1993; Kimberly, 1980). Given these theoretical implications, dominant institutional forces affecting SIFs are likely to come from the traditional philanthropic field and the mainstream venture capital field, rather than the SIFs' own emerging field.

Sources of Institutional Pressures

Scott (2008) has argued that institutions comprise three nominal “pillars”—regulative, normative, and cognitive—incorporating the legal (regulative), social (normative), and cultural (cognitive) aspects of institutions. Regulative pillars of institutions commonly take the form of regulations, laws, and rules (Hwang & Powell, 2005; North, 1990). The state and powerful actors both encourage and constrain organizational action by coercion (DiMaggio & Powell, 1983) or threat of legal sanctions (Hoffman, 1999). Normative pillars of institutions generally symbolize professional practices, occupational standards, and appropriate ways to pursue goals (Scott, 2008a). Organizational action and beliefs are guided largely by social obligation, norms or professionalization (Honig & Karlsson, 2004; Kirkpatrick & Ackroyd, 2003; Montgomery, Oliver, 1996; Ruef & Scott, 1998; Scott, 2008b). Organizations comply with them out of moral and ethical obligation or in conformance to norms established by universities, professional training institutions, and trade associations (DiMaggio & Powell, 1983). Cognitive (or cultural) aspects of institutions embody shared conceptions, symbols, language, and frameworks that constitute the nature of social reality (Meyer & Rowan, 1977). Organizations often obey them unconsciously (Zucker, 1983).

Although all organizations within a given institutional field are subject to the effects of institutional processes, not all experience pressures in the same way. Organizational adaptation to institutional pressures varies because of differences among organizations in the amount of pressure they experience and in their characteristics (Scott, 2008a). By reviewing prior studies on mechanisms of institutional processes, Scott (2008) draws attention to main organizational characteristics predicting adaptation

to institutional pressures. Two main mechanisms exist: Institutions affect organizations in the regulative, normative, and cultural-cognitive areas through such areas as (1) organizations' internal attributes (e.g., organizational structure, size, and management style) (Edelman, 1992; Sutton, Dobbin, Meyer, & Scott, 1994; Westphal & Zajac, 1995); and (2) their linkage (e.g., networks, board interlock, affiliations, donors and corporate sponsors' demands and expectations, and reference groups) (Galaskiewicz & Bielefeld, 1998; Galaskiewicz & Burt, 1991; Haunschild, 1993; Uzzi, 1996)⁷.

Drawing on Scott's regulative and normative theoretical frame, I have identified four sources reflecting distinct characteristics of SIFs: (1) organizational legal structure (regulative pressure); (2) training of the management team (normative pressure) as the internal attribute sources; (3) donors' and investors' demand for funding outcomes (regulative pressure); and (4) affiliation with professional associations (normative pressure) as the linkage sources. A typology of these sources is displayed in Table 2.1.

Table 2.1. Typology of Organizational Characteristics Associated with Institutional Pressures

	Internal attributes	Linkage
Regulative pillar	Legal structure	Donors' and investors' demand for funding outcomes
Normative pillar	Training of the management team	Affiliation with professional associations

Due to the institutional duality (Kostova & Roth, 2002) in the SIF field, institutional pressures are manifold and the effects are materialized in a more complex manner. That is, the common legal structure of organizations is nonprofit in the philanthropic field (Brody, 2006; Simon, Dale, & Chisolm, 2006) and for-profit in the

⁷ Scott (2008) discusses "reference groups" as the third mechanism. However, studies he cites are primarily about networks. I therefore include reference groups in the second category. It should also be noted that Scott states that this classification is not comprehensive.

venture capital field (Clark & Gaillard, 2003; Sahlman, 1990). The economics model of giving conceptualizes donors as “interested third parties whose demand for an organization’s service is on behalf of a client base to which they do not themselves belong” (Brown & Slivinski, 2006, p. 143). As such, although giving motivation can vary greatly across different donors⁸ (Burlingame, 1993), philanthropic scholars agree that donors in the traditional philanthropic field support nonprofit organizations because they care about how nonprofits serve the public good and achieve their missions (Ostrander, 2007; Payton & Moody, 2008; Vesterlund, 2006). On the other hand, investors in the venture capital field invest in growth-potential ventures, demanding strong financial results assessed usually by expected rate of return (Muzyka, Birley, & Leleux, 1996; Shepherd & Zacharakis, 1999).

Sources of normative pressures are also dichotomous between the philanthropic field and the venture capital field. Today, both the philanthropic field and the venture capital field have become professionalized, constituting influential professional associations. Since the passage of the 1969 Tax Reform Act forced private foundations to take stock of their situation, the Council on Foundations, followed by many grantmaking associations serving different regions or program areas, has been playing a central role in setting professional standards for grantmaking organizations in the philanthropic field (Wadsworth, 1975). Likewise, since its inception in 1973, the National Venture Capital Association has enjoyed widespread industry support from venture capital members and has normalized professional standards with which venture capital members

⁸ Philanthropic scholars point out that giving motivation involves an altruistic and egoistic nature (e.g., Burlingame, 1993). Economics theories also assume that for anyone to contribute, they will get some type of benefit from doing so, since tax deductions do not reduce the price of giving to zero (Vesterlund, 2006). In this theoretical assumption, there are public benefits and private benefits associated with giving.

agree to comply (Bruton, Fried, & Manigart, 2005). In addition to professional associations, formal education produced by universities and professional training are also instrumental for the development of organizational norms among professional managers (DiMaggio & Powell, 1983). Top management teams in venture capital funds often hold degrees such as a master's in business administration (MBA) and experience in the financial and consulting fields (Dimov & Shepherd, 2005). Not only the business field, but the philanthropic field also saw a dramatic growth in nonprofit management education in the 1990s (O'Neill, 2005). By 2007, 240 universities and colleges across the United States provided courses in nonprofit management education—graduate (including PhD), undergraduate, continuing education, and noncredit (Mirabella, 2007). As a result, a total of eight sources for regulative and normative pressures from two institutional fields have been identified, which are then used along with EO as independent variables for my hypotheses testing (Table 2.2).

Table 2.2. Typology of Institutional Pressures from the Two Mature Institutional Fields

		Philanthropic institution	Venture capital institution
Regulative pillars	Legal structure	Nonprofit	For-profit
	Donors' and investors' demand for funding outcomes	Donors' and investors' demand for social outcomes	Donors' and investors' demand for financial outcomes
Normative pillars	Affiliation with professional associations	Affiliation with the Council on Foundations and other grantmaker associations	Affiliation with the National Venture Capital Association and other venture capital associations
	Training of the management team	Management team's training in nonprofits	Management team's training in business

Hypotheses For Study 1: Factors Affecting Venture Philanthropy Practices

Using EO and eight institutional variables introduced in the previous section, this section proposes hypotheses testing main effects and moderating effects on venture philanthropy practices for Study 1. The main logics behind the hypotheses are displayed in Figure 2.1. All hypotheses for Study 1 are listed in Table 2.3.

Main Effects on Venture Philanthropy Practices

EO and Venture Philanthropy Practices

EO is generally conceived of as a unidimensional construct of innovativeness, proactiveness, and risk taking (Covin & Slevin, 1989; Miller, 1983). Innovativeness reflects a tendency to support new ideas, novelty, experimentation, and creative processes, thereby departing from established practices. Proactiveness refers to a propensity of anticipating and acting on future needs. With such a forward-looking perspective, proactive organizations capitalize on emerging opportunities. Risk taking reflects the organization's willingness to break away from the tried-and-true and to invest resources and efforts in projects where the outcomes are unknown (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003).

Figure 2.1. Conceptual Model for Study 1

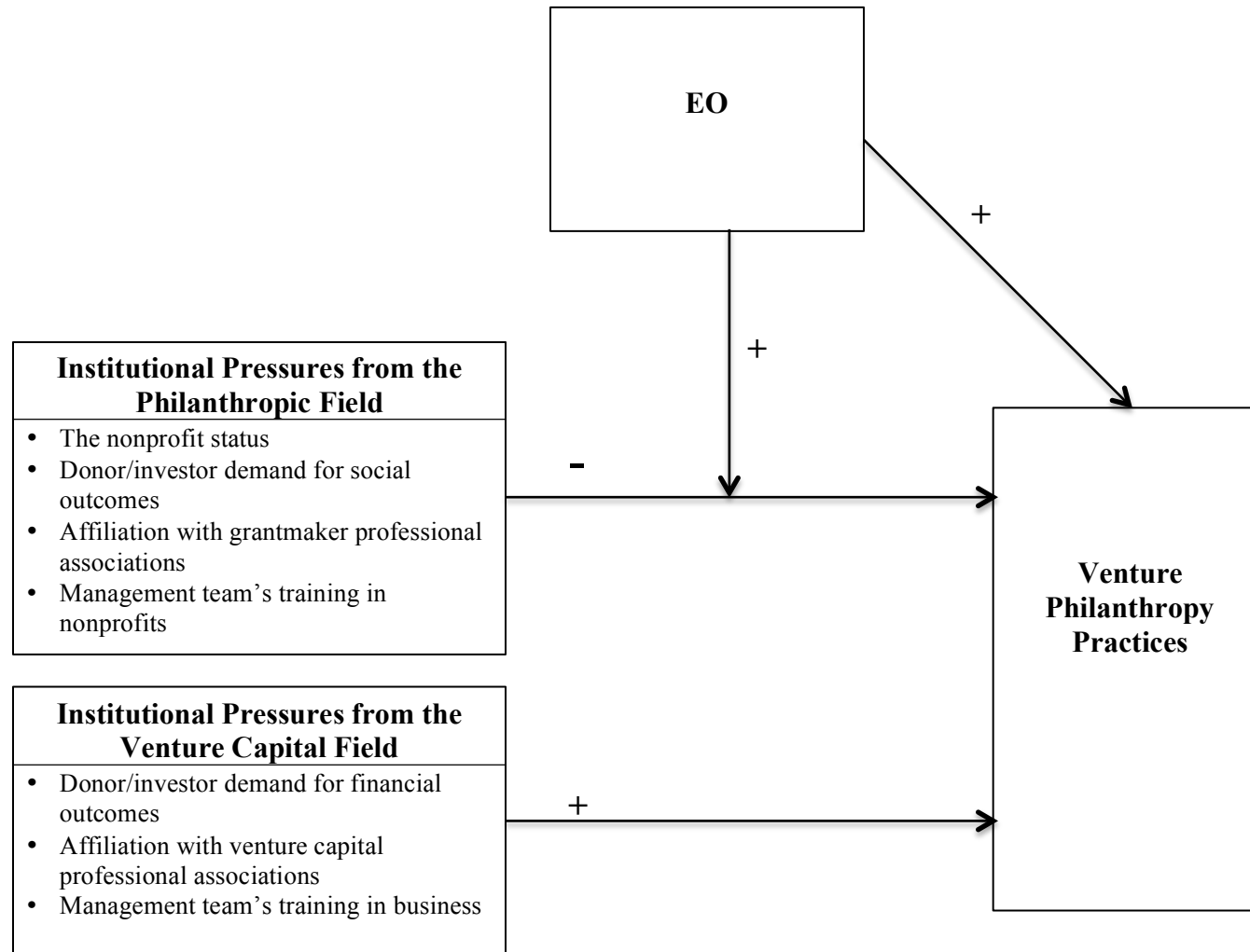


Table 2.3. A Summary of Hypotheses for Study 1: Effects on Venture Philanthropy Practices

	Hypotheses	Core concept
EO		
H1	EO is positively related to the extent of venture philanthropy practices.	EO
Regulative institutional pillars		
H2	The nonprofit status is negatively related to the extent of venture philanthropy practices.	Attribute (The legal structure)
H3a	The demand of donors and investors for social outcomes is negatively related to the extent of venture philanthropy practices.	Linkage (Donors'/investors' demand)
H3b	The demand of donors and investors for financial outcomes is positively related to the extent of venture philanthropy practices.	
Normative institutional pillars		
H4a	Affiliation with the Council on Foundations and other grantmaker professional associations is negatively related to the extent of venture philanthropy practices.	Linkage (Affiliation with professional associations)
H4b	Affiliation with the National Venture Capital Association and other venture capital professional associations is positively related to the extent of venture philanthropy practices.	
H5a	The management team's training in nonprofits is negatively related to the extent of venture philanthropy practices.	Attribute (The management team's training)
H5b	The management team's training in business is positively related to the extent of venture philanthropy practices.	
EO – The philanthropic institution interaction		
H6	EO moderates a negative effect of the nonprofit status on the extent of venture philanthropy practices, such that the relationship between the nonprofit status and venture philanthropy practices becomes positive for SIFs with a higher level of EO.	EO-Regulative (The legal structure)
H7	EO moderates a negative effect of donors' and investors' demand for social outcomes on the extent of venture philanthropy practices, such that the relationship between the donors'/investors' demand for social outcomes and venture philanthropy practices becomes positive for SIFs with a higher level of EO.	EO-Regulative (Donor/investor demand)

Table 2.3. (cont.)

	Hypotheses	Core concept
H8	EO moderates a negative effect of affiliation with the Council on Foundations and other grantmaker professional associations on the extent of venture philanthropy practices, such that the relationship between affiliation with grantmaker professional associations and venture philanthropy practices becomes positive for SIFs with a higher level of EO.	EO-Normative (Affiliation with professional associations)
H9	EO moderates a negative effect of the management team's training in nonprofits on the extent of venture philanthropy practices, such that the relationship between the management team's training in nonprofit and venture philanthropy practices becomes positive for SIFs with a higher level of EO.	EO-Normative (The management team's training)

To engage in venture philanthropy practices, organizations must first originate a venture philanthropy model and tools. Venture philanthropy is generally deemed as an approach bringing the discipline of the venture capital investment field to the philanthropic field (Frumkin, 2003) or vice versa. As such, early creators of a venture philanthropy model (e.g., NewSchools Venture Fund, Silicon Valley Community Foundation) actively sought to learn funding tools and practices of venture capital investment and borrowed them to invent a venture philanthropy model (Fleishman, 2009). Or, many founders of the early venture philanthropy organizations were high-tech entrepreneurs and venture capitalists (e.g., Robin Hood Foundation, Social Venture Partners, Venture Philanthropy Partners). These business entrepreneurs were undoubtedly familiar with venture capital investment but not with the culture and practices of traditional philanthropy (Hess, 2005). They, too, needed to familiarize themselves with unfamiliar areas of practices, i.e., traditional philanthropy, so as to adapt their familiar practices in the venture capital field to philanthropy (Moody, 2008).

These early venture philanthropists often focused their efforts on developing novel funding tools and practices for increasing the likelihood of success in nonprofits. These tools mirror a business-based venture capital investment model, such as the provision of a different kind of capital flow than nonprofits are used to receiving, the close monitoring of funded social ventures, and rigorous measurement of funding performance (Frumkin, 2008). In fact, many early venture philanthropists (e.g., Community Wealth Ventures, Inc., 2002; James & Marshall, 2006) stress that creation of those novel tools and practices, especially those departing from established and familiar

practices, required creative processes and countless experimentations, namely innovativeness.

However, innovativeness alone may not be sufficient to originate venture philanthropy tools. Prior to creation, venture philanthropists need first to invest a significant amount of time and effort in comprehending opposite culture and practices of philanthropy and venture capital investment. This process requires a high level of risk taking in many regards. First, as a model is based on an unconventional idea, outcomes of using a venture philanthropy model are highly uncertain. Second, investing in the creation and implementation of a venture philanthropy model may jeopardize the legitimacy of philanthropic organizations. As the very idea of venture philanthropy stemmed from a criticism of traditional philanthropy as engaging in “inefficient” practices (Letts et al., 1997), early venture philanthropists faced vocal criticism from veterans of traditional philanthropy and nonprofits (e.g., Edwards, 2009, 2011; Sievers, 2001). Engagement in such a controversial and unproven business-based model can undermine the reputation and legitimacy of philanthropic organizations. A recent study confirms that nonprofits experience a significant difficulty in engaging in entrepreneurial activities as they are concerned about stakeholders’ perceptions (Kirkpatrick & Ackroyd, 2003). Early venture philanthropists from the business field (e.g., Morino, 2005; REDF, 2013) also admit that they needed to devote considerable time and effort to rethink philanthropic traditions and adjust and refine their business approaches into more acceptable types of practices in the philanthropic community.

Furthermore, because a model was highly controversial and lacked legitimacy, early creators of venture philanthropy must have been proactive enough to introduce and

spread venture philanthropy ideas widely, so that the venture philanthropy model was received as a acceptable model before a negative image of the model that critics were painting penetrated the philanthropic field. With these logics, I will posit the first hypothesis:

Hypothesis 1. EO is positively related to the extent of venture philanthropy practices.

The Legal Structure and Venture Philanthropy Practices

Institutions' regulative pressures are represented by state influence through government mandates and regulations. Institutional scholars have found that the state's institutional pressures for organizational conformity sustain and perpetuate adherence to legitimated organizational activities (Baum & Oliver, 1991; DiMaggio & Powell, 1983; Oliver, 1992). As such, explicit processes of the mature legal regimes in philanthropic field and venture capital field are expected to regularize many aspects of SIFs' practices and funding tools.

Since the beginning of the 20th century (Cutlip, 1965), American philanthropy has grown into the institution of charitable giving totaling \$ 298.42 billion in 2011 (The Center on Philanthropy at Indiana University, 2012). \$41.67 billion of U.S. giving came from foundations, in which many nonprofit SIFs are included (Moody, 2008). Nonprofits are regulated primarily by the Internal Revenue Service (IRS), which provides them both benefits and constraints alike. Under U.S. tax law, nonprofits typically enjoy exemption from property, sales, and corporation income taxes. Those nonprofits qualified to be Internal Revenue Code (IRC) "501(c)(3) public charities" are granted special tax treatments, such as deductions of contributions to them (Internal Revenue Service, 2003).

Nonprofits, especially IRC 501(c)(3) public charities, receive these benefits under the condition that they are “organized and operated exclusively for religious, charitable, scientific, testing for public safety, literary, or educational purposes” (Internal Revenue Service, n.d.). A subsidy theory dictates that exemption and deductibility for nonprofits are needed to promote the provision of certain kinds of benefits to the public (Simon et al., 2006; Weisbrod, 1998). Therein, the IRS regulates types of funding and financing tools available for nonprofits. Traditionally, as nonprofits themselves, funders in the philanthropic field have designated their financial resources to other nonprofits. And, as nonprofits are not allowed to finance by equity capital from the mainstream capital markets (Hansmann, 1980; Tuckman, 1993), major funding tools in the philanthropic field have been non-market-based resources, such as philanthropic donations and grants (Wei-Skillern, Austin, Leonard, & Stevenson, 2007). Since venture philanthropy often addresses a use of market-based funding tools, nonprofit SIFs are not likely to take a risk by implementing venture philanthropy tools because results of not complying with government’s mandates will be highly punitive (DiMaggio & Powell, 1983).

In recent years, however, market-based funding tools have been developed for philanthropic funders. One of the most notable examples is program-related investments (PRIs), which are defined as investments by the regulations under U.S. Code Section 4944(c) (Federal Register, n.d.). While PRIs are funding tools based on the market-based mechanism (e.g., equity and debt), the primary purpose of PRIs is to accomplish one or more of the charitable purposes described in U.S. Code Section 170(c)(2)(B). The IRS requires private foundations to use PRIs to substantially further the accomplishment of their exempt activities (Internal Revenue Service, n.d.). Compliance with these legal

requirements necessitates additional resources on the part of SIFs. Therefore, even though some market-based funding tools are now available for nonprofit SIFs for their venture philanthropy practices, they may not choose to use these tools due to possible costs. These logics will direct us to the next hypothesis:

Hypothesis 2. The nonprofit status is negatively related to the extent of venture philanthropy practices.

Donors' and Investors' Demand for Funding Outcomes and Venture Philanthropy Practices

Regulative pressures can be both formal and informal, and are represented by an organization's dependence on resource providers (DiMaggio & Powell, 1983; Scott, 2008a). SIFs, either nonprofit or for-profit, allocate funding from their donors and investors to support social ventures. Thus, meeting the donors' and investors' demands and goals is critical for SIFs for their own legitimacy and economic viability.

Institutionalized values and beliefs shape definitions and criteria of social acceptability and responsiveness to publicly defined rules and practices (Oliver, 1991). Because a venture philanthropy model was non-existent before the 1990s, SIFs must first originate it. Many SIFs (Community Wealth Ventures, Inc., 2002) have explained that creation of a venture philanthropy model involved numerous experiments. As discussed above, philanthropic-minded donors and venture capital investors have almost contradictory interests in mind. Whereas philanthropic donors generally care about the public good provisions and missions (Ostrander, 2007; Payton & Moody, 2008; Vesterlund, 2006), venture capital investors usually demand superior return on investment (Muzyka et al., 1996; Shepherd & Zacharakis, 1999). The propensity of

philanthropic donors can be explained by the concept of “nondistribution constraint” (Hansmann, 1980). The nondistribution constraint shapes a perception of donors such that the nonprofit status should be an indicator of trustworthiness and a major goal of entrepreneurs who choose to create a nonprofit venture as a pursuit of mission rather than of profit (Bilodeau & Slivinski, 1998). As such, philanthropic-minded donors demand SIFs remain trustworthy and use well established funding tools in the philanthropic field: philanthropic grants. With such donors’ demand, SIFs may choose to refrain from engaging in an untested model of venture philanthropy.

In addition to the dichotomous nature of donor/investor demand, the nature of the donor/investor-recipient relationship also varies extensively between the philanthropic field and the venture capital field (Barman, 2007). The typical donor-recipient relationship nurtured in traditional philanthropy is reciprocal given the contextual nature of charitable giving (Halfpenny, 1999; Healy, 2000, 2004; Ostrander & Schervish, 1990; Ostrander, 2007; Sokolowski, 1996; Wolfe, 1998). On the other hand, the typical investor-recipient relationship in the venture capital field is a classic vertical principal-agent agency type (Arthurs & Busenitz, 2003; Barney, Busenitz, Fiet, & Moesel, 1989; Sahlman, 1990; Shepherd & Zacharakis, 2001; Wright & Lockett, 2003). Close involvement in daily operations of funded organizations, often through serving on the board, is typical in the venture capital field, but atypical and is often considered inappropriate in the philanthropic field (Orosz, 2000). Since serving on the board of funded social ventures is one of the common venture philanthropy practices (Letts et al., 1997), SIFs, if donors are philanthropic-minded, are less likely to engage in venture philanthropy, as their donors do not regard venture philanthropy as legitimate.

Conversely, because of a strong belief in efficacy of a business model among business entrepreneurs and investors (Kenney, 2000), using a business-based model of venture philanthropy is plausible for SIFs, whose investors are primarily from the venture capital field. Given these logics, I hypothesize:

Hypothesis 3a. The demand of donors and investors for social outcomes is negatively related to the extent of venture philanthropy practices.

Hypothesis 3b. The demand of donors and investors for financial outcomes is positively related to the extent of venture philanthropy practices.

Affiliation with Professional Associations and Venture Philanthropy Practices

In the normative pillars, professional and trade associations are powerful institutional actors for the definition and promulgation of normative rules and standards of professional practices (DiMaggio & Powell, 1983). They designate appropriate ways for organizations to behave through professional training and educational programs (Scott, 2008a). Creation and implementation of new business practices always require significant investment of resources. Early proponents of venture philanthropy claimed that a venture philanthropy model was ground-breaking (Moody, 2008). Creation of this novel model, therefore, must entail specialized skills and knowledge of traditional philanthropy and venture capital investment. This suggests that solid training from professional associations representing both the philanthropic field and the venture capital field is indispensable for SIFs to successfully create and employ a venture philanthropy model.

As the leading trade association that represents the venture capital industry, the National Venture Capital Association reinforces professional standards in the field

through training (Bruton et al., 2005; Fried & Hisrich, 1995). A venture capital model constituting five sequential steps—which venture capitalists regard as the most effective way to pursue their investment goals (Tyebjee & Bruno, 1984)—has been spread to member organizations through the Association’s trainings and publications. Because venture philanthropy is based on this venture capital model (Letts et al., 1997), a venture philanthropy model is not unconventional for the Association’s members.

The normative pillars not only provide benefits but often also impose constraints on organizational practices (Scott, 2008a), and do so, to a greater extent, on philanthropic organizations because they are extremely sensitive to their public legitimacy (Frumkin, 2008). As the most influential professional association for traditional philanthropic foundations, the Council on Foundations, too, sets professional standards and goals for philanthropic foundations and provides training to its member organizations. Its professional standards suggest that member organizations be committed to the public benefit (Council on Foundations, n.d.). According to the Council’s view, standard practices of philanthropy entail an effective use of grants and reciprocal donor-recipient relationships (Orosz, 2000; Prewitt, 2006b). While a venture philanthropy model has philanthropy as the end, the means is venture capital practices. Thus, member organizations of the Council on Foundations are not trained for this business-based model, even though it is modified into a philanthropic purpose.

Institutional theory dictates that networks facilitated by professional associations are also critical sources for legitimacy (Galaskiewicz & Bielefeld, 1998). Legitimacy is critical for organizations to survive and thrive (Suchman, 1995) and a legitimized social position is instrumental for institutionalism (DiMaggio & Powell, 1983; Scott, 2008a).

The reciprocity and exchange of resources with peer organizations through professional networks build trust and a sense of obligation to each other, and then enhance organizations' commitment to the field (Gulati, 1995). This reinforces that SIFs should adhere to standard practices according to leading professional associations—the Council on Foundations in philanthropy and the National Venture Capital Association in venture capital. SIFs affiliated with the Council on Foundations are more likely to accede to the values shared with other philanthropic organizations when this environment is highly interconnected (Oliver, 1991).

In sum, through a formal membership program and network, the Council on Foundations and the National Venture Capital Association provide their member organizations with a variety of benefits, such as legitimacy and interactions among peer organizations. To receive these benefits, member organizations are obligated to follow the associations' professional standards. These logics lead to the next set of hypotheses:

Hypothesis 4a. Affiliation with the Council on Foundations and other grantmaker professional associations is negatively related to the extent of venture philanthropy practices.

Hypothesis 4b. Affiliation with the National Venture Capital Association and other venture capital professional associations is positively related to the extent of venture philanthropy practices.

Management Team's Training and Venture Philanthropy Practices

New institutional scholars predict normative isomorphism by growing professionalization of managers because such professionalization exercises substantial influence in shaping organizational strategy and practices (DiMaggio & Powell, 1983). Conformity to institutional norms and rules often necessitate the hiring of specific types of professionals who hold certifications or accreditations. Hiring those professionals then

becomes an important source of legitimacy for organizations (Casile & Davis-Blake, 2002). Furthermore, informal networks among professionals who receive similar training help organizations obtain knowledge and skills to pursue their goals (Scott, 2008a).

Moody's (2008) exploratory study confirms that since creating a venture philanthropy model requires specialized skills of venture capital investment, training of the management team is instrumental for SIFs to create a venture philanthropy model. Moody found 5 of his 13 interviewees—in a disproportionate number (relative to other nonprofit leaders)—were MBAs and/or had work experience in the business world. In the early days, there was a notable preponderance of people with ties to the Stanford Graduate School of Business, where they both built professional networks and were socialized into the mind-set that a business approach should be used to improve the nonprofit sector. Today, SIFs often ask for a degree and/or professional experience in business, finance, or management consulting as a qualification for a new position (e.g., Acumen Fund, the Omidyar Network). For SIFs aligned with these professionals who share pro-business values and pro-market ideology (Dart, 2004a), engaging in a venture philanthropy model that borrows business models, however modified or adapted, establishes “moral legitimacy” (Suchman, 1995).

However, borrowing business models was not necessarily deemed legitimate in traditional philanthropy. Isomorphism scholars suggest that the repertoires constructed in a newly institutionalized field not only enable action but can limit it, as well (DiMaggio & Powell, 1983; Zucker, 1983). Letts and her co-authors (1997) illustrated that traditional philanthropic foundations tend to employ those trained in nonprofits or a program area relevant to their giving focus (e.g., environmental science, education). A

recent report (Mirabella, 2007) found that despite a growing emphasis on “management” (O’Neill, 2005), the largest proportion (47%) of nonprofit management programs are institutionally located within a college of liberal arts or a school of public affairs and administration. This finding should not be surprising, given that nonprofits (and government) are theorized to emerge from “failures of business”—“the market and contract failures” put forth by nonprofit economists (Weisbrod, 1975). Considering this antagonistic origin of the philanthropy-business relationship, many nonprofit practitioners and scholars have been deeply skeptical about a benefit of using venture philanthropy (Edwards, 2009; Frumkin, 2003, 2008; Sievers, 2001). With the theoretical and empirical evidence, I will posit:

Hypothesis 5a. The management team’s training in nonprofits is negatively related to the extent of venture philanthropy practices.

Hypothesis 5b. The management team’s training in business is positively related to the extent of venture philanthropy practices.

Moderating Effects on Venture Philanthropy Practices

A main research question of this study is whether or not moderating effects exist between EO and institutional pressures on SIFs’ engagement in venture philanthropy. This contingency idea assumes that SIFs with a higher level of EO resist negative pressures from the traditional philanthropic field and choose to originate and employ a business-based model of venture philanthropy. In this study, SIFs are viewed as organizations embedded in two institutions—traditional philanthropy and venture capitalism. EO then is expected to enable those institutionally constrained organizations

to acquire adequate skills and resources and to strategically resist and shape institutional pressures.

Drawing on EO and the new institutionalism, three main mechanisms can be proposed for how EO creates multifaceted effects in enabling SIFs to take a strategic approach to institutional constraints of philanthropy. (1) EO resolves the “paradox of embeddedness” of SIFs. Because high embeddedness in institutions influences organizations’ perceptions (Baum & Oliver, 1992; Dacin, 1997; Garud et al., 2007), EO reshape SIFs’ perceptions about the venture capital business model and its possible impacts on traditional philanthropy. (2) EO empowers SIFs to look for, locate, and leverage adequate resources to originate a novel model of venture philanthropy. (3) EO also helps SIFs with their legitimacy management. Because the institutional duality exposes SIFs to ambiguity (Kostova & Roth, 2002), EO enables SIFs to manage and maintain legitimacy in the two contrasting institutions of philanthropy and venture capitalism through effective communication with influential institutional actors (i.e., professional associations and major peer organizations).

As discussed above, innovativeness reflects organizations’ openness to novelty, experiments, and new creative solutions (Lumpkin & Dess, 1996). EO scholars have conceptualized innovativeness of business firms to increase their chances of capitalizing on emerging opportunities (Wiklund, 1999). Yet, innovativeness is not limited to economic opportunities but incorporates mission-based opportunities, as well. Nonprofit innovativeness is thus realized in organizations’ fulfillment of increased net revenues, of social mission, or even both together (Morris et al., 2011). Risk taking also enhances organizations’ willingness to commit significant resources to uncertain projects where

outcomes are unknown and a potential for meaningful loss may even occur (Lumpkin & Dess, 1996; D. Miller & Friesen, 1978). These theoretical implication suggest that EO directs SIFs to new and different perspectives regarding how a business model, though uncertain and unconventional, may assist with their pursuit of mission, as demanded by philanthropic-minded donors, and fulfillment of charitable purposes, as required by the IRS. With a high level of EO, SIFs reconsider their assumption that the use of market-based models does not necessarily create mission drift and jeopardize their social legitimacy (Jones, 2007; Weisbrod, 2004), by finding a way to accommodate professional norms set by the Council on Foundations. Moody's (2008) empirical account explains how early venture philanthropists have learned certain benefits of using a business model to achieve their philanthropic goal effectively and efficiently (Austin, Stevenson, & Weiskillern, 2006).

Once their perception of a business model has been reshaped, SIFs next need to acquire adequate resources (e.g., time, human capital, knowledge) and invest them in experimenting and developing a novel model of venture philanthropy into an effective tool to fulfill their goals. EO enables organizations to obtain new ideas and resources through a variety of networks with their existing resource base, combine them effectively, and enhance organizations' overall mix of resources (Stam & Elfring, 2008; Wiklund & Shepherd, 2005). As such, EO empowers SIFs embedded in traditional philanthropy to seek and gather new ideas and practices of venture capital investment through professional networks and to sort different perspectives, both positive and negative, so as to make a proper decision about how new resources from venture capitalism can most appropriately be combined with their existing resources from traditional philanthropy.

Risk taking enhances SIFs' skills to choose and implement novel ideas even in ambiguity and to create a most effective approach leading to exceptional outcomes, to which organizations have not previously been exposed and which otherwise may be ignored out of fear. A high level of EO also empowers institutionally constrained organizations to access multiple networks. Obtaining resources from multiple networks, rather than a single network, helps organizations diminish the chance of failure associated with risk taking behaviors (Uzzi, 2001). These processes reduce fear that SIFs embedded in traditional philanthropy may have of an unproven model and thus encourage SIFs to engage in venture philanthropy.

However, maintaining institutionally accepted goals and legitimacy is a difficult task. It is even more so for SIFs, because conflicting institutional logics caused by the institutional duality create a significant degree of ambiguity (Hoffman, 1999). This ambiguity undermines organizations' ability to determine institutional expectations. Thus, SIFs must stay alert and act proactively to counter any sign of mission drift. Here, proactiveness plays an important role. Proactiveness in the for-profit context is defined as the tendency of an organization to anticipate future wants and needs and to pursue change ahead of the competition (Lumpkin & Dess, 1996). Morris and his co-authors (Morris et al., 2011) argue that mission-pursuing organizations can be proactive in terms of both social innovations (a pursuit of mission and social outcomes) and commercial innovations (a pursuit of financial resources and economic outcomes). Hence, EO enables SIFs to develop a proactive attitude toward legitimacy management before it is jeopardized and to exploit high-quality communication with major actors in the philanthropic field in order to determine their expectation. Through close social relations

with powerful institutional actors, SIFs are able to maintain trust with peer organizations even while engaging in an unconventional model of venture philanthropy. Close social relations also help SIFs look for the way to adjust a business-model into a more appropriate model for philanthropy while maintaining legitimacy in the field.

In sum, EO enables and empowers SIFs to sort conflicting institutional signals, manage ambiguity caused by institutional duality, and meet demands from actors in the philanthropic field to maintain their legitimacy and economic vitality. Given this logic, four hypotheses are developed:

Hypothesis 6. EO moderates a negative effect of the nonprofit status on the extent of venture philanthropy practices, such that the relationship between the nonprofit status and venture philanthropy practices becomes positive for SIFs with a higher level of EO.

Hypothesis 7. EO moderates a negative effect of donors' and investors' demand for social outcomes on the extent of venture philanthropy practices, such that the relationship between the donors' demand for social outcomes and venture philanthropy practices becomes positive for SIFs with a higher level of EO.

Hypothesis 8. EO moderates a negative effect of affiliation with the Council on Foundations and other grantmaker professional associations on the extent of venture philanthropy practices, such that the relationship between affiliation with philanthropic associations and venture philanthropy practices becomes positive for SIFs with a higher level of EO.

Hypothesis 9. EO moderates a negative effect of the management team's training in nonprofits on the extent of venture philanthropy practices, such that the relationship between the management team's training in nonprofits and venture philanthropy practices becomes positive for SIFs with a higher level of EO.

Hypotheses For Study 2: Factors Affecting Social And Financial Performance

Study 2 investigates the main effects and moderating effects on SIF performance. While the method chapter will discuss performance in more detail to construct variables, it is important to first understand how performance is conceptualized in the nonprofit context because it differs significantly from how performance is conceptualized in the for-profit context. I thus begin with conceptualization of SIF performance. The main logics behind the hypotheses for Study 2 are displayed in Figure 2.2 and all hypotheses for Study 2 are listed in Table 2.4.

Figure 2.2. Conceptual Model for Study 2

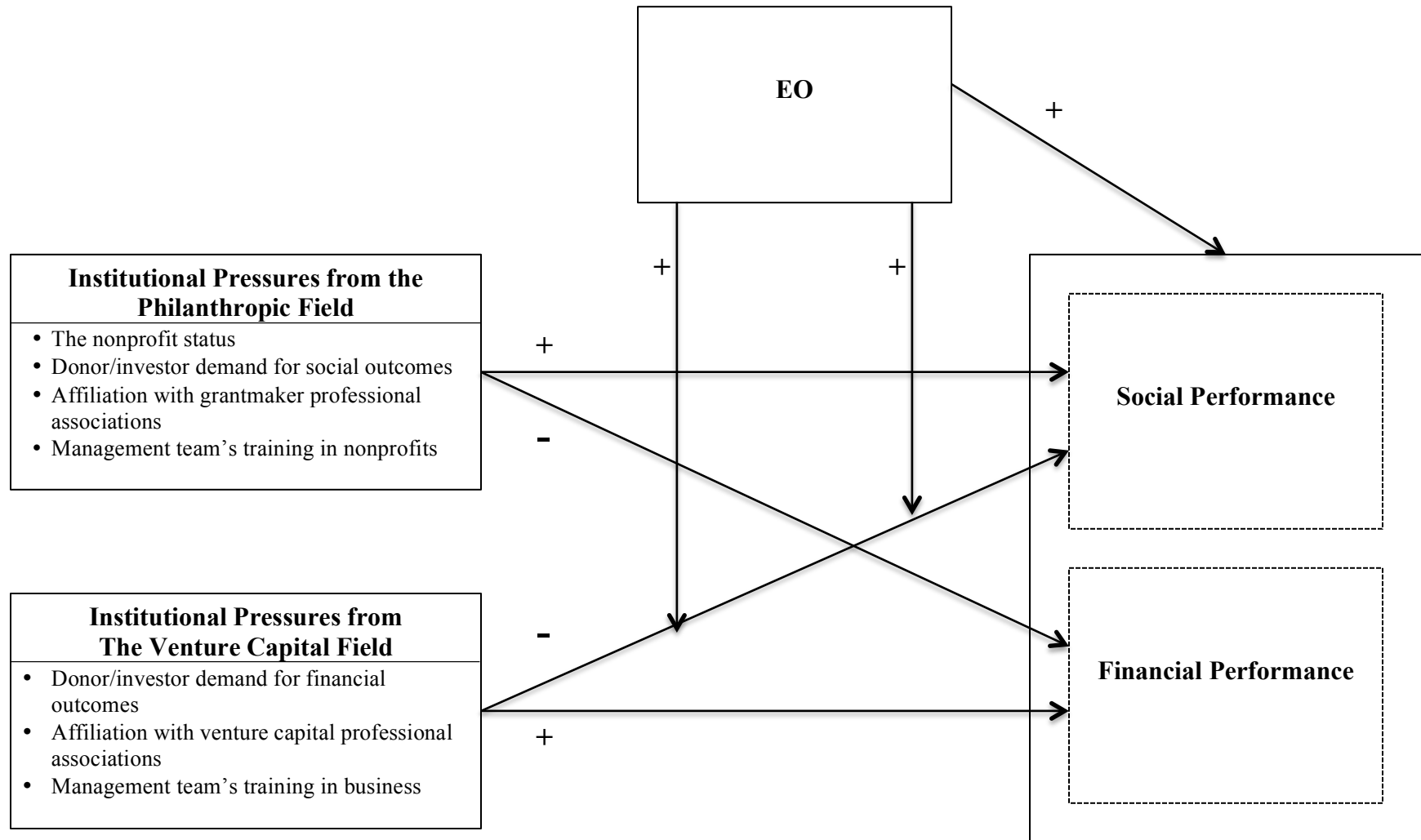


Table 2.4. A Summary of Hypotheses for Study 2: Effects on Social and Financial Performance

	Hypothesis	Core concept	DV
EO			
H10	EO is positively related to social performance.	EO	Social performance
H11	EO is positively related to financial performance.		Financial performance
Regulative institutional pillars			
H12	The nonprofit status is positively related to social performance.	Attribute (The legal structure)	Social performance
H13	The nonprofit status is negatively related to financial performance.		Financial performance
H14a	The demand of donors and investors for social outcomes is positively related to social performance.	Linkage (Donor/investor demand)	Social performance
H14b	The demand of donors and investors for financial outcomes is negatively related to social performance.		
H15a	The demand of donors and investors for social outcomes is negatively related to financial performance.		Financial performance
H15b	The demand of donors and investors for financial outcomes is positively related to financial performance.		
Normative institutional pillars			
H16a	Affiliation with the Council on Foundations and other grantmaker professional associations is positively related to social performance.	Linkage (Affiliation with professional associations)	Social performance
H16b	Affiliation with the National Venture Capital Association and other venture capital professional associations is negatively related to social performance.		
H17a	Affiliation with the Council on Foundations and other grantmaker professional associations is negatively related to financial performance.		Financial performance
H17b	Affiliation with the National Venture Capital Association and other venture capital professional associations is positively related to financial performance.		

Table 2.4. (cont.)

	Hypothesis	Core concept	DV
H18a	The management team’s training in nonprofits is positively related to social performance.	Attribute (The management team’s training)	Social performance
H18b	The management team’s training in business is negatively related to social performance.		Financial performance
H19a	The management team’s training in nonprofits is negatively related to financial performance.		
H19b	The management team’s training in business is positively related to financial performance.		
EO – Venture capital institution interaction			
H20	EO moderates a negative effect of donors’ and investors’ demand for financial outcomes on social performance, such that the relationship between donors’ and investors’ demand for financial outcomes and social performance becomes positive for SIFs with a higher level of EO.	EO-Regulative (Donor/investor demand)	Social performance
H21	EO moderates a negative effect of affiliation with the National Venture Capital Association and other venture capital professional associations on social performance, such that the relationship between affiliation with venture capital professional associations and social performance becomes positive for SIFs with a higher level of EO.	EO-Normative (Affiliation with professional associations)	
H22	EO moderates a negative effect of the management team’s training in business on social performance, such that the relationship between the management team’s training in business and social performance becomes positive for SIFs with a higher level of EO.	EO-Normative (The management team’s training)	

Table 2.4. (cont.)

	Hypothesis	Core concept	DV
<i>EO – Philanthropic institution interaction</i>			
H23	EO moderates a negative effect of the nonprofit status on financial performance, such that the relationship between the nonprofit status and financial performance becomes positive for SIFs with a higher level of EO.	EO-Regulative (The legal structure)	Financial performance
H24	EO moderates a negative effect of donors' and investors' demand for social outcomes on financial performance, such that the relationship between the donors' and investors' demand for social outcomes and financial performance becomes positive for SIFs with a higher level of EO.	EO-Regulative (Donor/investor demand)	
H25	EO moderates a negative effect of affiliation with the Council on Foundations and other grantmaker professional associations on financial performance, such that the relationship between affiliation with philanthropic associations and financial performance becomes positive for SIFs with a higher level of EO.	EO-Normative (Affiliation with professional associations)	
H26	EO moderates a negative effect of the management team's training in nonprofits on financial performance, such that the relationship between the management team's training in nonprofits and financial performance becomes positive for SIFs with a higher level of EO.	EO-Normative (The management team's training)	

Conceptualization of SIF Performance

Performance is measured by how effectively and efficiently a goal is achieved. The institutional duality, however, makes SIFs' funding goals multifaceted. The market size and potential do not guarantee high performance (Austin, Stevenson, & Weiskillern, 2006), as financial considerations of investing in profit-maximizing ventures are often not comparable to investing in mission-maximizing ventures. For this reason, prior literature on SIFs and social entrepreneurship (Bonini & Emerson, 2005; Emerson, 2000, 2003; O'Donohoe, Leijonhufvud, Saltuk, Bugg-Levine, & Brandenburg, 2010) often discusses two broadly defined types of performance: (1) social performance, and (2) financial performance. Entrepreneurship scholars also assess investment performance, focusing either on (1) funders and funds (Dimov & Shepherd, 2005) or (2) their invested ventures (Arthurs & Busenitz, 2006; De Clercq & Sapienza, 2006). I will draw on these implications as a framework to conceptualize social performance and financial performance for this study.

Social Performance

Social performance has been discussed and defined primarily in the traditional philanthropic field. According to Frumkin (2008), there are two types of philanthropic giving: (1) instrumental giving and (2) expressive giving. The former is deemed more "strategic," as it is focused on achieving a particular policy objective and is intended to accomplish a significant impact on specified social problems. Expressive giving, on the other hand, reflects a donor's personal desire to support a cause or organization without necessarily expecting noticeable impacts. This classification suggests that social

performance is determined not only by how large an impact is made on society, but also by how much a donor's own value is met.

Funding performance is measured on the status and performance of funded ventures (Arthurs & Busenitz, 2006; De Clercq & Sapienza, 2006), as well. With a primary goal of attaining social missions, social ventures seek to create socially desirable values that are not spontaneously produced by private markets. Austin and his co-researchers (Austin, Gutierrez, Ogliastri, & Reficco, 2006) have found two different measures explicating social performance by social ventures: (1) depth (how much value is attained; and (2) breadth (how widely the impact is made). Depth of social performance is recognized by how much social mission is attained, to what degree the values of beneficiaries are fulfilled, and what outputs are created for them. Such values for beneficiaries are often qualitative (Kanter & Summers, 1987), and are ensured, for instance, through removal of social and economic barriers and mitigation of undesirable side-effects of economic activity (Austin, et al., 2006). These outcomes reflect the uniqueness of social issues of each beneficiary group, community, and socio-economic condition. Hence, social performance needs to be defined and bounded in its value proposition for each stakeholder, especially beneficiaries.

Financial Performance

In a mainstream venture capital investment, financial performance can be predicted from potential risks and returns of investment associated with how likely funds and their funded ventures alike are to attain economic goals (Shepherd & Zacharakis, 1999; Tyebjee & Bruno, 1984). As such, major criteria to infer financial performance of

venture capital investment include (1) return on investment (ROI) (Shepherd, Armstrong, & Lévesque, 2005); and (2) the status and outcomes of funded ventures, such as an initial public offering (IPO), acquisition by another company, and additional financing (Cochrane, 2005; De Clercq & Dimov, 2008; Dimov & Shepherd, 2005). Pursuing superior financial performance, funders are often most interested in the performance of funded ventures, because better performance of funded ventures is more likely to bring higher return (Shepherd et al., 2005).

Two types of financial resources are discussed for SIFs' funded social ventures: (1) market-based resources, such as sales of goods/services, fees, loans, PRIs (foundations' loans or equity often at below-market interest rates), and stock (if a venture is for-profit); and (2) non-market-based resources, such as donations, grants, and government contracts (Emerson, 1998, 2000; Grønbjerg, 1993; Tuckman, 1993; Young, 2006). Financial self-sufficiency of funded social ventures is often measured by net assets, total revenue increase, and income diversification via commercial revenue (Alter, 2004; Coombes, Morris, Allen, & Webb, 2011; Kaplan, 2001; Morris, Coombes, Schindehutte, & Allen, 2007). To secure revenue, social ventures often rely on a wide range of and/or mix of financing instruments (Chell, 2007; Emerson, 2003). Due to fiscal constraints of nonprofits, diversification of revenue streams is considered as a way to mitigate a financial risk in case of the loss of some donor bases. Therefore, many SIFs, such as Acumen Fund, insist on revenue diversification as a main criterion determining self-sustainability of funded social ventures (Emerson, Spitzer, & Mulhair, 2006). Other SIFs, such as Google.org and the Omidyar Network, even choose to structure their own

organizations as a hybrid between nonprofit and for-profit (Fleishman, 2009) so they are able to provide diverse financial resources to their funded social ventures.

Despite the merits of having market-based resources, institutional theory indicates that non-market philanthropic resources are more critical for social ventures than market-based resources, as such philanthropic resources represent the public acceptance and legitimacy of recipient organizations. Philanthropic resources are often indispensable for social ventures to attain breakeven in their commercial activities, also, because their “clients” can rarely afford to pay for services. Furthermore, the centrality of social missions often makes social ventures less attractive to mainstream investors (Weiskillern et al., 2007). Thus, seeking philanthropic resources may be a more efficient—or, the only available—strategy for social ventures to enhance financial performance.

Additional Implications for Social and Financial Performance

A review of how social and financial performance has been conceptualized stresses that SIF performance is complex and multifaceted. To develop a theory and hypotheses, understanding other implications for superior SIF performance is critical. Prior literature has shown: (1) funders’ capacity to estimate a risk-return balance to find the right investment for superior performance (Dimov & Shepherd, 2005; Dimov, Shepherd, & Sutcliffe, 2007); and (2) funded social ventures’ organizational capacity (Cable & Shane, 1997; Tyebjee & Bruno, 1984). Cooperative relationships between funder and recipient have been found to enhance capacity-building of funded social ventures in the philanthropic field (Grønbjerg, Martell, & Paarlberg, 2000). These implications are reflected in the following discussions.

Main Effects on Social and Financial Performance

EO and Social and Financial Performance

Miller (1983) suggests that EO facilitates an organization's willingness to support new ideas and engage in strategies in which the outcome may be highly uncertain. EO literature has extensively discussed a positive relationship between EO and firm performance (Lee, Lee, & Pennings, 2001; Wiklund & Shepherd, 2003; Wiklund, 1999; Zahra & Covin, 1995). While organizational goals and processes differ between for-profits and nonprofits, the same logics are applied to the EO-performance relationship in the nonprofit context (Coombes et al., 2011; Morris & Jones, 1999; Pearce et al., 2010).

Morris, Webb and Franklin (2011) propose that nonprofit innovation can be manifested in fulfillment of social missions, revenue augmentation by earned income activities, or a combination of both. The IRS data demonstrates that despite Reagan's budget cuts, the number of nonprofits actually increased by more than thirty percent (Salamon & Abramson, 1982; Salamon, 1987). That is, nonprofits found and exercised innovations directed particularly at financial performance exemplified by market-based strategies such as new earned income activities (Chetkovich & Frumkin, 2003; Foster & Bradach, 2005; Young, 2007).

Accounts by philanthropic scholars (Anheier & Leat, 2006; Fleishman, 2009) also imply that EO can contribute to improving SIFs' social performance. They suggest that if foundation officers are open to a new organizational and managerial culture and are willing to adopt novel activities, it will help reshape their foundation's mission and goal selection. This adaptation process, in turn, helps a foundation discover a new innovative

way to partner with a social venture that produces great social impacts and raises funds effectively.

Innovativeness empowers an organization's efforts to pursue new combinations that provide a new basis for meeting stakeholders' needs (Pearce, Kramer, & Robbins, 1997), which leads to social performance. Many empirical accounts support this. Leading SIFs, such as Ashoka and Acumen Fund, address an innovative way to solve grave societal ills and to make a positive impact in society by combining and mobilizing resources offered by their "fellows," who are social entrepreneurial professionals. Simultaneously, this innovative network is very cost-effective, as it is composed of like-minded and highly motivated volunteers. Other SIFs create innovative ways to manage a proper balance of funding return and risk. The Omidyar Network, for instance, has nonprofit and for-profit divisions. This unique hybrid structure enables the Omidyar Network to diversify types of funding tools and types of portfolio ventures. Pacific Community Ventures decouples their core technology (Elsbach & Sutton, 1992; Meyer & Rowan, 1977) to enhance social performance and financial performance together by providing social services to the underserved through its 501(c)(3) unit, whereas making equity investment to achieve high return through its for-profit unit. REDF proposes novel investment vehicles based on different mixes blending social and financial returns: (1) capital generating greater financial return than social return; (2) capital generating a blend of social and financial return with financial returns lower than the risk-adjusted market rate for greater social returns; and (3) capital maximizing social return, but no direct financial return other than the tax deduction from philanthropic giving (Emerson, Bonini, & Brehm, 2003).

Risk taking is the willingness to act outside of accepted practices and norms (Pearce et al., 2010). As such, risk taking is also instrumental for SIFs' use of novel funding tools, because these tools have not been proven and future outcomes are highly uncertain. Nonprofit proactiveness refers to a posture of anticipating and acting on future social needs, financial needs, and stakeholder needs (Morris et al., 2011). Such a forward-looking perspective helps SIFs seek and identify a potentially serious societal issue proactively and invest in programs that help limit damage in society. The Rockefeller Foundation's investment in the "Green Revolution" led by Norman Borlaug is a good example of how nonprofit proactiveness can make a massive (worldwide, in this case) and long-lasting social impact by innovating agricultural technology and saving over a billion people from starvation (Fleishman, 2009). With those theoretical and empirical accounts, I will posit:

Hypothesis 10. EO is positively related to social performance.

Hypothesis 11. EO is positively related to financial performance.

The Legal Structure and Social and Financial Performance

The role of institutional influence is particularly significant in highly regulated fields where well-laid-out rules and laws govern organizational forms and operations (DiMaggio, 1988). As discussed in Study 1, nonprofit SIFs are typically structured as IRC 501(c)(3) public charities or foundations⁹. As legal coercion from the traditional philanthropic field is highly strong, acquiescence can best serve nonprofit SIFs' interests

⁹ The common classification of American foundations is based on the law that charters foundations. The approximately 60,000 foundations are generally classified into four subgroups: independent grant-making foundation (90 percent), corporate foundations (about 4 percent); operating foundations (about 3 percent); and community foundations (1 percent).

(Oliver, 1991). That is, IRS requirements and taxpayers' demand shape goals of SIFs' funding performance. Institutional theorists argue that when the force of government mandates buttress cultural expectations, organizations are made more aware of public interests and then are less likely to respond defiantly because the consequences of noncompliance are highly punitive and strictly enforced (Oliver, 1991). Prior to 1969, the only sanction for a tax-exempt organization's serious transgressions was termination of tax-exempt status (Simon et al., 2006).

A subsidy theory (Simon et al., 2006; Weisbrod, 1998) also underscores that as tax-exempt entities, nonprofit SIFs must be legitimate and accountable to the public by channeling their funding for advancement of social causes and meeting public demand. Federal regulations also require SIFs structured as community foundations (e.g., the Center for Venture Philanthropy of the Peninsula Community Foundation) to choose grant committee members representing the broader community. In sum, under today's regulative system in the philanthropic field, SIFs must play an "instrumental role" of philanthropy (Frumkin, 2008) in producing and providing the public good in society at large (Grønbjerg et al., 2000; Guo & Brown, 2006; Orosz, 2000; Ostrower, 2006). As discussed in the previous sections, these approaches lead to higher social performance. With this logic, the next hypothesis is posited:

Hypothesis 12. The nonprofit status is positively related to social performance.

In the mainstream venture capital field, profitability is the most common indicator to evaluate financial performance (Muzyka et al., 1996; Shepherd & Zacharakis, 1999). Philanthropic scholars warn of a possible trade-off between social performance and

financial performance, because a pursuit of both may result in harmed institutional legitimacy (Kanter & Summers, 1987). Thus, conformity to philanthropic regulative pressures is likely to deter SIFs from pursuing superior financial performance. Although increased revenue is not entirely contradictory to the IRS requirements of nonprofits, surplus is encouraged insofar as it is used for the public good purpose (Peredo & Chrisman, 2006). For instance, private foundations may use PRIs, but they must obey the IRS rules to keep their tax-exempt status. In sum, nonprofit organizations can be more resistant to pressures from economic rationality because efforts to manage financial performance can be perceived as inconsistent with the goal of high quality social service delivery (Whetten, 1978). This logic leads to the next hypothesis:

Hypothesis 13. The nonprofit status is negatively related to financial performance.

Donors' and Investors' Demand for Funding Outcomes and Social and Financial Performance

Donors and investors are institutional actors coercing organizational behaviors because of their power over recipient organizations, which are dependent on those providers of critical resources for organizational survival (Pfeffer & Salancik, 1978; Scott, 2008). According to institutional theory, resource providers prefer socially acceptable organizations, as these organizations do not threaten the providers' reputation for good judgment (Baum & Oliver, 1991). Philanthropy allows donors to “express their values, to single out particular issues or causes as being worthy of attention, and, through gifts of money, to support activities that benefit the public” (Frumkin, 2008, p. 1). As such, these philanthropic donors demand social outcomes—fulfillment of mission and

provision of the public good. As prior literature has used “mission pursuit” as one of the critical indicators to assess social performance (Coombes et al., 2011), SIFs’ efforts to meet their donors’ demand for social outcomes help enhance social performance.

Institutional scholars have found that internal and external tensions and additional opportunity costs negatively affect financial performance (Heugens & Lander, 2009). Especially, tensions with resource providers can easily become sources of constraints and disturbances interfering with the routines an organization relies upon to pursue their work effectively and efficiently (Basu, Dirsmith, & Gupta, 1999). Because tensions can arise from divergences between their philanthropic-minded donors and financial performance, conforming to philanthropic donors’ demand for social outcomes is thought to deter SIFs from pursuing financial performance. Also, due to different methods required for assessing social and financial performance, meeting philanthropic donors’ demand for social performance while trying to enhance financial performance will create substantial burden. Furthermore, SIFs’ use of market-based funding tools to pursue financial performance may lead to a “crowding-out effect”—or reduction of philanthropic revenue (Kingma, 1995; Okten & Weisbrod, 2000). Philanthropic donors may take commercialization of SIFs’ funding as a sign that SIFs may not need their donations, and as a result, withdraw their support (Weisbrod, 1998). Then, the next two hypotheses are offered:

Hypothesis 14a. The demand of donors and investors for social outcomes is positively related to social performance.

Hypothesis 14b. The demand of donors and investors for financial outcomes is negatively related to social performance.

Economic accountability and rationalization are important objectives of institutional pressures from investors who demand financial outcomes (Pfeffer & Leong, 1977). Institutional theorists dictate that resource providers prefer organizations which have “rational” strategies from the providers’ perspective and isomorphic organizations are more likely than their deviant counterparts to attract financial resources of higher quality at favorable terms (Baum & Oliver, 1991; Deephouse, 1999). For venture capital investors who have a central concern about financial performance, performance data must be calculated and presented by objective methods standardized in the venture capital institutions (Shepherd, Zacharakis, & Baron, 2003). Unlike social performance, financial performance allows for this quantitative measurement. Conforming to venture capital investors also helps enhance financial performance by funded social ventures, which then leads to enhancing SIFs’ own financial performance. A close relationship between funders and funded ventures is common in the venture capital field. This close relationship is found to facilitate an efficient provision of various added values to assist funded ventures with building organizational capacity including increased net revenue and acquisition of other funding (Busenitz, Fiet, & Moesel, 2004).

On the contrary, if major donors are from the traditional philanthropic field, conformity to their demand for social outcomes is likely to hinder financial performance. Attempts to quantify performance are recognized as harmful by philanthropic donors, because quantitative methods are not capable to measure their unique values and thus may ignore them (Edwards, 2009, 2011). As a result, SIFs’ attempt to conform to philanthropic donors’ demand and to enhance financial performance create internal and external tensions (Heugens & Lander, 2009). A central drive to pursue social mission

may also allow SIFs whose major donors are highly philanthropic to be less concerned about financial performance (Zietlow, 2001). Adequate organizational capacity to pursue financial performance may not be even available. Therefore, the following hypotheses are posited regarding effects on financial performance.

Hypothesis 15a. The demand of donors and investors for social outcomes is negatively related to financial performance.

Hypothesis 15b. The demand of donors and investors for financial outcomes is positively related to financial performance.

Affiliation with Professional Associations and Social and Financial Performance

As influential institutional actors, professional associations set norms in the particular organizational field (DiMaggio & Powell, 1983). Norms specify how things should be done (Scott, 2008a, pp. 54–55) and direct SIFs' attempts to define performance and set the primary goal (Zacharakis et al., 2007). And, by following institutional norms, organizations gain legitimacy and become social acceptable. Legitimacy is critical for superior performance from the institutional theory perspective, as performance is often conceptualized as “symbolic”—a type of performance shaped by organizational reputation and public perception (Heugens & Lander, 2009).

The Council on Foundations has established the primary goal of philanthropy as “maximizing the public good” (Council on Foundations, n.d.). The public good means differently in each case, as values that each stakeholder has are idiosyncratic. This idiosyncrasy creates a substantial uncertainty. DiMaggio and Powell (1983) illustrate where there is significant uncertainty and when legitimacy pressures are strong, organizations engage in “mimetic behavior,” i.e., mimicking successful organizations

within the same field. Thus, facing uncertainty, SIFs look for the most socially acceptable cases of other organizations through professional networks. If SIFs are affiliated with the Council on Foundations, they gain access to other organizations through the Council's professional network and most likely learn practices of how to achieve superior social performance, because that is the shared goal of the Council's member organizations.

A pursuit for superior performance entails a rigorous performance measurement. While measuring financial performance is a standard practice for venture capital firms, measuring social performance against this standard practice leads to considerable opportunity cost. According to institutional theory, bearing additional opportunity cost is a hurdle for efficient operation, and thus undermines organizational performance (Heugens & Lander, 2009). Therefore, I hypothesize:

Hypothesis 16a. Affiliation with the Council on Foundations and other grantmaker professional associations is positively related to social performance.

Hypothesis 16b. Affiliation with the National Venture Capital Association and other venture capital professional associations is negatively related to social performance.

The primary goal defined by the National Venture Capital Association is to maximize ROI and bring a high financial gain to limited partners (Wasserman & Robinson, 2000). Pursuing this taken-for-granted goal, SIFs are expected to enhance financial performance. Affiliation with the Council on Foundations provides legitimacy for SIFs, however in return obliges SIFs to follow the common goal of philanthropy. From an institutional perspective, the goal is not necessarily about efficiency, but rather

symbolic. Organizational adaptation is initially to improve efficiency and productivity, but later becomes primarily for legitimacy purposes (DiMaggio & Powell, 1983). Organizations may choose to engage in mimetic behavior even when the behavior undermines efficiency of organizational management (Barreto & Baden-Fuller, 2006). This potential trade-off between legitimacy and performance is due to the fact that, on one hand, legitimacy-based imitation enables organizations to increase their probability of survival (Meyer & Rowan, 1977), while on the other, the likelihood of survival can be obtained at the expense of financial performance (Barreto & Baden-Fuller, 2006; Henderson, 1999). Thus, the pursuit of the Council's goal may ensure survival of SIFs, but may also cost their financial performance. Given this logic, I will hypothesize:

Hypothesis 17a. Affiliation with the Council on Foundations and other grantmaker professional associations is negatively related to financial performance.

Hypothesis 17b. Affiliation with the National Venture Capital Association and other venture capital professional associations is positively related to financial performance.

Management Team's Training and Social and Financial Performance

Isomorphism scholars dictate that a profession plays a crucial role in advancing normative isomorphism in an organizational field (DiMaggio & Powell, 1983; Scott, 2008a). People who have the same credentials, formal education and professional experiences manage organizations in much the same way (Shenhav, 1995; Sutton et al., 1994). Norms often are spread not only through formal but also informal networks created by those former classmates or colleagues (Moody, 2008) and such informal networks enhance information exchanges. The "structuration" theory (Giddens, 1979)

suggests that such increases in the amount of interaction among organizations accelerate the development of a consensus on goals. As such, professionals trained in nonprofits view their performance goals as maximizing the public good, whereas professionals trained in business define their performance goal as maximizing ROI.

Organizations are more willing to acquiesce to institutional pressures when these pressures or expectations are compatible with internal goals (Oliver, 1991). Thus, if the management team is trained in nonprofits, the pursuit of social performance is compatible with the management's goal, which then encourages SIFs to carry out this shared goal. Conversely, if the management team is trained in business, the goal is not compatible with what social performance will lead to. This goal divergence creates internal tensions and harms performance (Barreto & Baden-Fuller, 2006). If consistency of goals is low, SIFs may even lack the capacity to maintain adequate social performance and simultaneously conform to expectations of the business-trained management team (Oliver, 1991). Thus, I posit:

Hypothesis 18a. The management team's training in nonprofits is positively related to social performance.

Hypothesis 18b. The management team's training in business is negatively related to social performance.

The quality of the management team with financial capacity has been discussed as the most important determinant for superior financial performance (Shepherd & Zacharakis, 1999). However, the mission centrality of nonprofit-trained professionals may lead to their lower attention to managerial execution and fail to emphasize the importance of financial performance (Austin, Stevenson, & Wei-Skillern, 2006). A

nonprofit's much smaller economic incentives for employees may hinder SIFs from obtaining adequate human capital to enhance financial performance (Oliver, 1991). The significant heterogeneity of stakeholders with whom nonprofit managers typically work (Maguire et al., 2004) may also create management and cultural tensions in an effort to pursue strong financial performance. While a founder may be entrepreneurial and want to experiment with revenue augmentation activities, many constituencies may be simply threatened by the idea of seeking double-bottom-line (Chell, 2007). Given these, I posit:

Hypothesis 19a. The management team's training in nonprofits is negatively related to financial performance.

Hypothesis 19b. The management team's training in business is positively related to financial performance.

Moderating Effects on Social and Financial Performance

Summarizing the review and meta-analysis results by Heugens and Lander (2009)¹⁰, three reasons are considered for a negative relationship between conformity to institutional pressures and performance: (1) positive costs resulting from a need to acquire required resources to resist institutional constraints (Barreto & Baden-Fuller, 2006); (2) internal and external tensions which can interfere with organizational effective management (Basu et al., 1999); and (3) lowered potential of differentiation, thereby lowered sustained competitive advantage (Deepphouse, 1999). Above all, conflicting institutional logics caused by the institutional duality (Kostova & Roth, 2002) impedes SIFs from determining what are institutional expectations on the nature of performance

¹⁰ Heugens and Lander (2009) distinguish "substantive performance," defined as the extent to which organizations are able to generate accounting-based profits or increase their overall market value, from "symbolic performance" defined as the extent to which they generate positive social evaluations, which leads to an organization's legitimacy.

goals. Because performance is assessed based on how well the goal is met, this goal ambiguity undermines SIFs' effort to improve performance.

These implications suggest that for SIFs to achieve superior performance despite institutional pressures, SIFs need to do one or more of the followings. (1) Because conformity to different institutional demands necessitates additional costs for investment and these costs undermine performance, EO needs to enable SIFs to obtain and manage knowledge-based resources effectively and efficiently enough to minimize costs for additional investment. (2) SIFs need to mitigate conflicts and goal ambiguity to achieve superior performance. Because conflicts and goal ambiguity easily arise from competing institutional logics and they also repress performance, EO needs to enable SIFs to manage these conflicts and identify performance goals through close communication with stakeholders. (3) Because realizing funding social outcomes requires time and cooperative relationships with stakeholders, EO needs to help SIFs build social capital and manage trust with stakeholders.

EO Moderating Effects on the Venture Capital Institutions-Social Performance Relationship

This study predicts that SIFs with a higher level of EO are able to achieve superior social performance even under the negative pressures of the venture capital field. The pursuit of multiple and competing goals usually necessitates additional costs for investment and these costs tend to undermine performance (Barreto & Baden-Fuller, 2006). Thus, for enhancing performance while meeting investors' demand for financial outcomes, it is essential for SIFs to have a capacity of obtaining and managing

knowledge-based resources effectively and efficiently to reduce costs. The resource-based theory (Barney, 2001) dictates that the way an organization is organized can lead to a positive relationship between performance and resources. Drawing on EO and the resource-based view, Wiklund and Shepherd (2003) have argued that EO can improve an organization's overall resources and performance as well. Thus, EO is thought to enhance SIFs' resource base. Innovativeness facilitates SIFs' effort to pursue competing goals of a social performance and venture capital investors in the most efficient and cost-effective way. Proactiveness is of vital importance for SIFs' effective acquisition and management of unique resources. These unique resources are not abundant and SIFs need to obtain those unique resources before other organizations retain them. Risk taking is indispensable to avoid additional costs, also. Making an investment in a type of a project that goes against institutional demands requires organizations to take a risk. Some organizations—in particular, risk-averse nonprofits—may take a longer time to decide whether or not they undertake a novel project. While such a cautious attitude is perceived as wise, they will also incur additional costs from time and efforts to confirm the validity. Funding any ventures, especially social ventures, is highly risky. In almost all circumstances, funders need to proceed without guarantees of success.

Many empirical accounts support this theoretical argument. REDF established the Farber Fellow/Intern Program to recruit MBA students from business schools. In the early days of venture philanthropy, the biggest challenge was to capture and measure social impact, which traditional philanthropists thought would be impossible (Kanter & Summers, 1987). As a leading SIF, REDF originated an innovative and complex method to monetize social impacts, called “Social Return on Investment (SROI)” by applying

business accounting concepts. With data from this method, their investors from the venture capital industry could better capture where their investment was. Creating this type of complex method, with no other preceding model available, would normally have been extremely costly. However, REDF managed to minimize the cost by using its Farber fellow (Suzi Chun) and Farber intern (Jay Wachowicz) (Emerson et al., 2000). As one of the first recipients of the federal Social Innovation Fund (Corporation for National and Community Service, n.d.), REDF's accomplishments in producing significant social benefits have been widely acknowledged. Simultaneously, with its entrepreneurial actions, REDF has substantially reduced the cost incurring from creating the new metric tool to meet demands from their venture capital investors, while making a substantial social impact. Thus, I hypothesize:

Hypothesis 20: EO moderates a negative effect of donors' and investors' demand for financial outcomes on social performance, such that the relationship between investors' demand for financial outcomes and social performance becomes positive for SIF with a higher level of EO.

Hypothesis 21: EO moderates a negative effect of affiliation with the National Venture Capital Association and other venture capital professional associations on social performance, such that the relationship between affiliation with venture capital professional associations and social performance becomes positive for SIFs with a higher level of EO.

Hypothesis 22: EO moderates a negative effect of the management team's training in business on social performance, such that the relationship between the management team's training in business and social performance becomes positive for SIFs with a higher level of EO.

EO Moderating Effects on the Philanthropic Institutions-Financial Performance Relationship

EO is grounded in the strategic choice perspective and concerns the “intentions and actions of key players functioning in a dynamic generative process” (Lumpkin & Dess, 1996: p. 136). EO promotes “dispersed” entrepreneurship (Birkinshaw, 1997, 1999), which is the involvement of multiple management levels in the formulation and implementation of entrepreneurial strategies (Richard et al., 2004). That is, EO enhances an organizational capacity to manage conflicts arising from diverse stakeholders at multiple levels—the management team, donors and investors, government, professional associations and peer organizations, and community stakeholders and beneficiaries. A high level of EO enables SIFs to interpret and scan different institutional expectations, choose the most appropriate and applicable demands to meet, identify their primary goals, and learn the most effective way to assess performance outcomes of their institutional actors to meet their idiosyncratic demands before any conflicts arise. Managing institutional conflicts and goal ambiguity is critical to attain superior performance, and thus, such entrepreneurial activities of SIFs are likely to lead to better performance.

A capacity for managing conflicts from the institutional duality is particularly important when SIFs are nonprofit and/or rely on philanthropic donors for funding. These actors are critical resources for the organizations (Bridges & Villemez, 1991) or governments with legislative power over them (Abzug & Mezas, 1993). Conflicting institutional logics can cause inconsistency between organizational interests and institutional requirements. Imbalance or lack of consensus among institutional actors in

the environment may impede conformity to the institutional demand (Meyer & Rowan, 1977). As discussed previously, an inability to meet demands from the IRS and philanthropic donors often leads to concrete and severe punitive results. At the same time, when institutional influence is highly uncertain and unpredictable (Pfeffer & Salancik, 1978), SIFs may exert greater effort to reestablish the illusion or reality of control and stability over future organizational outcomes (Oliver, 1991). For instance, during periods of instability in the acquisition of funding, SIFs may be more willing to comply with the demands imposed upon them by philanthropic donors. However, by doing so, SIFs may sacrifice financial performance because of a gap in goals. EO enables SIFs to find innovative ways to manage conflicting institutional pressures and still to attain superior financial performance.

Decoupling (Elsbach & Sutton, 1992; Meyer & Rowan, 1977; Tolbert & Zucker, 1999) was found to be one of the main strategies for SIFs to manage conflicts. During my exploratory and qualitative research, the CEO of one of the interviewee organizations explained their challenges in pursuing financial outcomes as an IRC 501(c)(3) public charity while providing job training and other social service programs to the unemployed in the community. Several years later, they decided to create another organization structure as a limited liability corporation solely for the purpose of running successful equity investment and achieving competitive ROI for their investors. According to her, conflicts disappeared and the fund has been yielding a competitive profit because investment managers now have a very clear goal of performance they need to accomplish. With these empirical accounts, the last set of the hypotheses for this dissertation are developed:

Hypothesis 23: EO moderates a negative effect of the nonprofit status on financial performance, such that the relationship between the nonprofit status and financial performance becomes positive for SIFs with a higher level of EO.

Hypothesis 24: EO moderates a negative effect of donors' and investors' demand for social outcomes on financial performance, such that the relationship between the donors' demand for social outcomes and financial performance becomes positive for SIFs with a higher level of EO.

Hypothesis 25: EO moderates a negative effect of affiliation with the Council on Foundations and other grantmaker professional associations on financial performance, such that the relationship between affiliation with philanthropic associations and financial performance becomes positive for SIFs with a higher level of EO.

Hypothesis 26: EO moderates a negative effect of the management team's training in nonprofits on financial performance, such that the relationship between the management team's training in nonprofits and financial performance becomes positive for SIFs with a higher level of EO.

Summary

This chapter introduces a theoretical framework of dominant institutions' pressures on SIFs and conceptualizes social and financial performance. Hypotheses are posited, discussing organizations' EO, the legal structure, donors' and investors' demand for funding outcomes, affiliation with professional associations, and the management team's training as key main-effect factors affecting SIFs' venture philanthropy practices and social/financial performance. The hypotheses also consider moderating effects, as represented by EO and negative institutional pressures, on SIFs' responses to institutional constraints. In the next chapter, I review the methodological considerations implemented to test these hypotheses.

CHAPTER 3: RESEARCH METHOD

This chapter introduces the empirical context of the study and justifies my decision of using this sample to pursue my theoretical and empirical inquiries. Second, I review the data sources used to construct a comparable sample selection and introduce the criteria that define the population of interest. Third, I discuss the operationalization and the measures of dependent, independent, and control variables. Finally, the chapter concludes by reviewing the analytical procedures applied.

The Overview of Research Methods

The majority of data for this study were gathered through surveys. Ensuring construct and content validity is critical to conduct survey research, but a challenge in this study is that it examines an emerging field and there is only very limited prior research that exists on the subject. Under such circumstances, scholars often employ a qualitative method (Glaser & Strauss, 1967; Lee, 1999; Marshall & Rossman, 2010). The rationale for my decision to begin my research in a qualitative method is based on several factors. The empirical case I investigated is an emerging field of SIF and the focal phenomenon of SIF is not well understood (Van Slyke & Newman, 2006). There were numerous nuances that needed to be clarified first. Most publications on SIFs are anecdote-based and lack systematic quantitative data. In sum, “qualitative research is often the most ‘adequate’ and ‘efficient’ way to contend with the difficulties of an empirical situation” (Glaser & Strauss, 1967, p. 18).

This study accordingly employed a triangulation strategy entailing mixed research methods (Denzin, 2009; Webb, Campbell, Schwartz, & Sechrest, 2000). The triangulation method is particularly effective and appropriate when a case is not well understood, because the use of multiple measures may uncover some unique variance that otherwise may have been neglected by single methods (Jick, 1979). Content analysis is a methodology that reliably develops measures to interpret textual material (Krippendorff, 2004) and that in the last decade has been increasingly used in management studies (Duriau, Reger, & Pfarrer, 2007). Table 3.1 presents methods applied to each stage of this empirical study.

Table 3.1. Research Methods Used for This Study

Purpose	Research method	Data source
<i>Qualitative method</i>		
Scale construction	Content analysis (Krippendorff, 2004, 2012)	<ul style="list-style-type: none"> • Interviews • Organizational publications
<i>Quantitative method</i>		
Hypotheses testing	Multiple regression with interaction terms (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003)	<ul style="list-style-type: none"> • Survey questionnaire

Sample

The empirical context of this study is the emerging field of social investment funders (SIF) in the United States (Young, 2007). As many authors point out (Bielefeld, 2009; Moody, 2008), the field lacks a clear, standardized definition specifying what SIF organizations are. In the last decade, a variety of new terms were coined describing

unique “hybrid” funding practices (Young, 2004). Major examples include such terms as “venture philanthropy” (Frumkin, 2003), “social venture capital” (Miller & Wesley, 2010) and “impact investing” (Bugg-Levine & Emerson, 2011). Despite some discrepancies in the terminology, all these terms share one idea: linking philanthropy and for-profit venture capital practices to support nonprofit, and sometimes for-profit, organizations whose primary services are mission-oriented and beneficial to the public (Peredo & Chrisman, 2006), i.e., collectively consumed public goods (Weisbrod, 1988), rather than maximizing profit for personal and shareholders’ private wealth (Chell, 2007) (hereafter called *social ventures*). However, empirical studies suggest that the values generated by social ventures are not limited to social elements. Within their entrepreneurial process of social ventures, there is a balance of social and economic behavior that creates both social and economic values (Austin et al., 2006; Emerson et al., 2000).

This study defines SIFs as *organizations that utilize both philanthropic and venture capital investment practices to support social ventures and whose primary goal is to create positive, and often non-monetary, values in society, while generating financial consequences to some degree*. “Financial consequences” are exemplified through diverse forms, such as a social venture’s fiscal sustainability revenue as part of its organizational capacity developed through a funder’s financial and non-financial support (Letts et al., 1997). Other forms of financial consequences include tangible benefits, such as financial return on investment for investors (Emerson, 2003) and the augmentation of a social venture’s revenue (Zietlow, 2001). In this study, SIFs are distinguished from mainstream venture capitalists, who primarily invest in ventures in markets with high growth

potential and a focus on maximizing economic benefits for shareholders (Muzyka et al., 1996; Shepherd & Zacharakis, 1999). SIFs are also differentiated from traditional foundations, which chiefly use non-market, philanthropic funding tools such as grants. It should be noted, however, whether or not SIFs are new and distinct from their traditional counterparts is highly debatable (Frumkin, 2003). Yet, compared to traditional philanthropic foundations, a distinct characteristic of SIFs is identified in their rigorous adaptations of venture capital practices, such as an investment cycle consisting of deal origination, screening, evaluation, and structuring, and post-investment activities and exit strategy (De Clercq & Dimov, 2008; Tyebjee & Bruno, 1984) and language typically used in the venture capital and high-tech industries, such as “investment” instead of “grant” (Frumkin, 2003; Moody, 2008).

A recent study has found that the distinct practices and language of SIFs are the artifacts developed during the “structuration” process (Giddens, 1984) under the strong institutional influence of the philanthropic field and the venture capital field (Moody, 2008). These two established fields are divergent or almost antithetical in terms of many aspects of institutions (Scott, 2008a), which creates the institutional duality. Anecdotes in prior studies also imply that the adaptation of a venture philanthropy model may necessitate that organizations be entrepreneurial because they need to break through conservative culture (Anheier & Leat, 2006; Fleishman, 2009; Hess, 2005; Prewitt, 2006b).

These implications allow SIFs to be the ideal sample for my investigation based on the application of entrepreneurial orientation (EO) and institutional theories, and they justify my application of institutional theory to entrepreneurial organizations in a single-

country study. Scholars are cautioned against using institutional theory for single-country studies because single-country studies increase the difficulty in judging the impacts of institutions (Bruton et al., 2010). However, in my study, significant disparity exists in institutional elements, such as laws, norms, and culturally shared ideas (Scott, 2008a), between the philanthropic field and the venture capital field in the United States. Having multiple distinct institutions is indispensable “for scholars to be able to address the effects of institutions so that theory can be developed for use by other scholars” (Bruton et al., 2010, p. 432). The traditional philanthropic field and the venture capital field have such competing and conflicting natures in their regulative, normative, and cultural systems that it justifies my research plan.

Sampling Method

Two primary challenges surface in forming the proper sample for research on SIFs: (1) The lack of a universally agreed-upon definition of SIFs; and (2) a limited population size, which unavoidably leads to a small sample size. A lack of clear definitions can be a serious threat to undermine construct validity. In this situation, it is critical to look both at researchers and to subjects as sources of agreement on the most useful definition (Babbie, 1998). I thus consulted a variety of both scholarly and practitioner-oriented sources to construct my sample.

First, I attended the Social Capital Markets Conference in San Francisco from October 13-15, 2008, along with my advisor; this is a leading conference inviting numerous SIFs. We conducted preliminary interviews with conference presenters and participants representing SIFs to establish realism in the field. I made continued efforts

to interview industry experts and to review relevant publications issued from fall 2008 to spring 2011 to enhance my understanding about the field.

Second, I reviewed scholarly literature to determine how SIFs were conceptualized and what types of organizations were included in the studies (Table 3.2). As most prior studies stress, SIFs comprise an extremely diverse group, ranging from nonprofit funders such as public charities, private foundations and giving circles that use grants as their main funding tool (Community Wealth Ventures, Inc., 2000; Frumkin, 2003; Moody, 2008) to for-profit funders and some newly created nonprofits that make equity investments (Clark & Gaillard, 2003; Miller & Wesley, 2010). Some researchers include influential long-standing foundations in their samples (Fleishman, 2009; Standlee, 2006).

Third, I interviewed four industry experts. Two experts are CEOs at large professional associations, one for a social venture capital fund and the other for a private foundation. Another expert is a consultant specializing in mission-based investments of private foundations. The fourth expert is a former director of one of the leading SIFs and the thought leader in the field, who coined the terms “venture philanthropy” and “impact investing.” The chief objective of these interviews was to clarify whether it is appropriate to study organizations labeled as “venture philanthropists” and those labeled as “social venture capital investors” together in the same research. The former do not necessarily utilize equity investment as a funding tool. Recent publications about “impact investing” tend to exclude these funders and focus on equity investors only. However, findings from my interviews confirm that both “venture philanthropy” and “social venture capital” should be discussed in the same realm for social investing. This

broad conceptualization is similar to the approach of John (2006) and Scarlata & Alemany (2010). My study aims to capture the variances in the extent to which a wide range of internal and external factors drive organizations to employ the venture philanthropy model. Thus, I follow a broader definition to include diverse organizations in my sample as long as they use venture philanthropy practices to some degree.

The second threat to the sample construction of SIFs is a possible small sample size resulting from the very limited size of the population and difficulty in obtaining responses from the intended survey participants. To deal with these potential threats, authors in prior empirical studies about SIFs (Miller & Wesley, 2010; Scarlata & Alemany, 2008, 2010) relied on multiple sources to identify their sample organizations (Table 3.3). For instance, Scarlata and Alemany (2010) used five different sources to identify their sample organizations. Although their response rate is favorable in the field (54 percent), their sample size is 40 organizations, because the population they identified is as small as 74. The field of SIFs has grown dramatically since then. To assure a statistical power for regression analysis (Cohen & Cohen, 1983), my committee members and I determined that the sample size in my study must include more than 50 organizations. Thus, I sought a greater number of sources than five to maximize a search result for constructing my primary sample.

Consequently, a total of 16 different sources were reviewed to identify organizations for my study (Table 3.4). These sources are broadly classified into two types: (1) Self-identified sources, in which organizations identify themselves as SIFs; and (2) third party-identified sources, in which third parties, such as scholars, identify organizations as SIFs. Self-identified sources include the Guidestar database (under the

keyword of “venture philanthropy”), directories of SIF associations such as Investors’ Circle, Social Venture Partners, and Community Development Venture Capital Fund Alliance. Survey reports (e.g., Venture Philanthropy Partners, 2002) and case studies about venture philanthropy by scholars (e.g., Fleishman, 2009; Moody, 2008) are among third-party sources used for this study.

Table 3.5 exhibits steps that this study sequentially took in order to construct the final population for the empirical analysis. My sampling procedure consisted of two steps. The initial step was to review the sources listed in Table 3.3, and this step yielded 528 organizations as the primary population. However, this population was found to include organizations that were not applicable to my research design. Examples of those organizations were: unincorporated voluntary groups; foreign organizations incorporated and operated outside the United States; organizations providing services and goods, rather than financial resources, as their primary activity; and membership associations without funding social ventures themselves. Thus, the next step was to screen this primary population by using six criteria that allowed me to properly utilize theoretical lenses of EO and institutional theories for analysis. For inclusion in the sample, organizations had to meet the following criteria: (1) being institutional funders that are formally incorporated as either nonprofit or for-profit under the United States laws; (2) having a formal operation base under the United States laws; (3) having funding as a primary activity; (4) using at least some of the venture philanthropy approaches; (5) having an explicit social intent; and (6) having information about organizations and contacts available. These criteria identified 291 organizations as the final population, which I invited to participate in the survey.

There are several justifications for the sample selection criteria of this empirical study. First, this study excluded individual investors, as the unit of analysis for both EO and institutional theory is often at the organization level. Foreign organizations that do not have any operation in the United States were also excluded in order to examine organizational behaviors by the same legal and societal conditions and to reduce unobserved heterogeneity resultant from different legal and normative systems between countries. This study also excluded 134 organizations that were misclassified as SIFs but turned out to be program providers, membership associations, or consulting firms. Funders that do not employ a venture philanthropy model or do not have a social intent were also excluded. Finally, organizations that did not provide contact information needed to be removed from the list because survey questionnaires could not be delivered.

Table 3.2. Definitions of SIFs by Selected Prior Literature

Authors	Term used for SIF	Definition	Organization types included in the study
Clark & Gaillard (2003)	“Double-bottom line” private equity	“[I]nvestment funds and organizations that make early-stage equity investments in scalable for-profit ventures and that do so with the intent of positively impacting social or environmental problems.” (p. 3) “Each of the funds in our survey identified itself as interested in investing to achieve social or environmental impact as well as financial return — an approach this group prefers to call ‘double bottom line’ investing.” (p. 5)	Nonprofit and for-profit organizations that make equity investments
Community Wealth Ventures (2000)	Social venture funds	“[W]e defined a social venture fund as follows: a multi-donor fund specifically created to address social issues that utilizes venture capital practices to maximize investor value and impact.” (p. 8)	Nonprofit organizations including giving circles and foundations
Eikenberry (2006)	Venture philanthropy	“is structured to follow a venture philanthropy model—applying venture capitalist principles to philanthropy.” (p. 522)	Nonprofit organizations including giving circles and foundations
Fleishman (2009)	Venture philanthropy	“In this approach, the foundation provides financing in exchange for significant involvement in and some degree of control of the program being supported. For instance, a foundation that is basically playing a Partner role might ask for the right to specify particular strategic implementation tasks to be performed by the grantees according to an agreed-upon timeline, with specified benchmarks and required performance reports.” (p. 7)	Foundations
Frumkin (2003)	Venture philanthropy	“Rather than simply being a purveyor of charitable funds for deserving organizations of all sorts, venture philanthropy promised to turn donors into hard-nosed social investors by bringing the discipline of the investment world to a field that had for over a century relied on good faith and trust.” (p. 8)	Nonprofit organizations including giving circles and foundations
James & Marshall (2006)	Venture philanthropy	“[W]hat is arguably new is that [venture philanthropy] folds these practices into a systematic framework that mimics the vaunted for-profit venture capital model. In short, venture philanthropists aspire to build the capacity of nonprofit organizations.” (p. 108)	Foundations

Table 3.2. (cont.)

Authors	Term used for SIF	Definition	Organization types included in the study
John (2006)	Venture philanthropy	“There is no single accepted definition of venture philanthropy. Several terms are used interchangeably, including strategic philanthropy, high-engagement philanthropy, effective philanthropy or philanthropic investment. For the purpose of this paper, venture philanthropy is defined primarily by the relatively high level of engagement of the funder in the organisation being supported, over an extended time period, injecting skills or services in addition to finance.” (p. 7)	Nonprofit and for-profit organizations that provide a wide range of funding including grants and equity
Miller & Wesley (2010)	Social venture capitalists (SVCs)	“Social venture capital (also called patient capital or venture philanthropy) uses a new model for funding social ventures. Like commercial venture capital, this model allows the entrepreneur to exchange involvement in the operations for continued funding as SVCs often invest through equity in the early stages of social ventures using limited liability corporations or partnerships.” (p. 707)	Nonprofit and for-profit organizations that make equity investments
Moody (2008)	Venture philanthropy	“[A] core set of principles and practices that are espoused by the majority of venture philanthropy organizations... 1) Investments in a long-term (3-6 year) plan for social change; 2) A managing partner relationship; 3) An accountability-for-results process; 4) Provision of cash and expertise; and 5) An exit strategy” (Gray & Speirn, 2004, p. 1). Venture philanthropy involves close monitoring of predetermined performance goals and measurements as well as joint problem solving with nonprofit investees throughout the long-term duration of the funding.” (p. 9)	Nonprofit organizations including giving circles and foundations
Scarlata & Alemany (2008)	Philanthropic venture capitalists (PhVCs)	“Philanthropic venture capitalists are social subjects whose aim consists of investing those funds raised from various donors—who may be wealthy individuals, enterprises, and/or foundations—in organizations with high social impact. In order to maximize the social return from the investment, PhVCs engage in a value-added partnership with the target organization and mete out financing based on the reaching of milestones. As such, PhVCs monitor the progress of the firms they back not only providing capital but also expertise and strategic guidance. Besides, in case PhVCs take a seat on the board of directors of the organizations they back, they retain important rights which allow them to intervene in the company’s operations when necessary.” (p.3)	Nonprofit organizations including foundations (European for-profit funds included)

Table 3.2. (cont.)

Authors	Term used for SIF	Definition	Organization types included in the study
Scarlata & Alemany (2010)	Philanthropic venture capitalists	“[A]n intermediated investment in small-medium SEs with a potential for a high social impact. Financial return considerations may, however, also be taken into account but must be of secondary importance to the attainment of social impact.”	Nonprofit and for-profit organizations that provide a wide range of funding including grants and equity (European funds included)
Van Slyke & Newman (2006)	Venture philanthropy	“In contrast to a traditional, hands-off charitable grant awarded to a nonprofit organization by a community, private, or corporate foundation, venture philanthropists and their philosophy of high-engagement regard funding as a long-term investment. Whereas many foundations have traditionally provided grants for a single year or perhaps as long as three years, venture philanthropists and their organizations, funders, and staff, such as Venture Philanthropy Partners and the Roberts Enterprise Development Fund, generally enter into a relationship with a social enterprise nonprofit organization for a longer period of time because they believe the nonprofit can benefit from long-term engagement and substantial financial investments and levels of strategic assistance in the organization. The investments of strategic assistance and capitalization are intended and designed to build organizational systems and capacity focused on achieving lasting outcomes for the clients they serve.” (p. 347)	Community foundation

Table 3.3. Sources and Selection Criteria for Sample Constructions, Sample Size and Return Rate of Selected Prior Literature

Study	Source	Selection criteria	Sample size and return rate
Miller & Wesley (2010)	<ul style="list-style-type: none"> • Database of National Venture Capital Association • Columbia University Research Initiative in Social Entrepreneurship (RISE) survey (2003) 	<ul style="list-style-type: none"> • Directly fund ventures on a competitive basis (excluding foundations and angel investors) • Dedicate at least 10% of the assets to social ventures through equity investment • Invest in early-stage ventures • Executives have experience and some decision-making authority in funding decisions 	<ul style="list-style-type: none"> • 57 responses from 274 program analysts and executives who made funding decisions on social ventures (20.7% response rate)
Scarlata & Alemany (2010)	<ul style="list-style-type: none"> • Database of European Venture Philanthropy • Database of National Venture Capital Association • Morino Institute (2000) • John (2006) • Identified by other sample organizations 	<ul style="list-style-type: none"> • Provide financial and non-financial resources • Fund social enterprises • Have exit strategies • Seek social impact 	<ul style="list-style-type: none"> • 40 responses from 74 funds including 36 U.S. nonprofit, foundations, and for-profit (54% response rate)

Table 3.4. Sources Used to Construct the Sample for This Study

Self-/Third party-identified	Type	Source used for this study
Self-identified sources	Directories and databases of membership associations	<ol style="list-style-type: none">1. Guidestar databases under the keyword of “venture philanthropy”2. The Foundation Center’s Foundation Director Online database under the keyword “venture philanthropy”3. Panelist lists of the Social Capital Market Conferences in 2008, 2009, 20104. Directory of Investors’ Circle5. Director of Social Venture Partners6. Directory of Social Investment Forum’s Socially Responsible Financial Services group7. Directory of Community Development Venture Capital Fund Alliance
Third party-identified sources	Survey reports, scholarly publications, and peer organizations	<ol style="list-style-type: none">1. Columbia University Research Initiative in Social Entrepreneurship (RISE) survey (2003)2. Community Wealth Ventures/Venture philanthropy Partners (2002)3. Community Wealth Ventures/Venture philanthropy Partners (2000)4. Capers, Collins & Gooneratne (1997)5. Firstenberg (2003)6. Fleishman (2007)7. Moody (2007)8. Standlea (2006)9. Identified by peer organizations

Table 3.5. Sample Selection Procedure

	Number of organizations
<i>Sources to identify the primary population:</i>	
(1) Guidestar database under the keyword “venture philanthropy”	107
(2) The Foundation Center’s Foundation Director Online database under the keyword “venture philanthropy”	100
(3) Panelist lists of the Social Capital Market Conferences in 2008, 2009, 2010	247
(4) Directories of membership associations (Investors’ Circle, Social Venture Partners, Social Investment Forum’s Socially Responsible Financial Services group, and Community Development Venture Capital Fund Alliance)	72
(5) Columbia University Research Initiative in Social Entrepreneurship (RISE) survey (2003)	54
(6) Community Wealth Ventures/Venture Philanthropy Partners surveys (2002; 2000)	91
(7) Research publications (Capers, Collins & Gooneratne, 1997; Firstenberg, 2003; Fleishman, 2007; Moody, 2007; Standlea, 2006)	60
(8) Identified by peer organizations	2
Minus duplicated listings among (1) ~ (8)	(205)
Primary population total	528
<i>Selection criteria:</i>	
(1) Formally incorporated institutional funders with legal status of nonprofit or for-profit (government agencies are excluded)	(2)
(2) Domestic organizations (Organizations that do not have an office incorporated in the United States are excluded)	(13)
(3) Funding as a primary activity (Service providers, associations, and research organizations are excluded)	(134)
(4) Explicit use of venture philanthropy model	(12)
(5) Explicit social intent	(4)
(6) Availability of information about organizations and contacts	(72)
Final population of interest total	291

Survey Instrument

Main data for this study were gathered by a survey questionnaire. The survey contained 19 questions along with a brief instruction of the survey participation and clarification of key terms used in this study, and it comprised the following five parts: (1) general information, (2) staff and leadership team, (3) funding performance, (4) relationships with social enterprises, and (5) revenue and other financial information.

Assuring the accuracy of measurement of the constructs under examination is the greatest difficulty in conducting survey research (Barrett, 1972). Hence, scholars should make efforts to ensure construct validity and reliability when developing a survey instrument (Babbie, 1998; Hinkin, 1995, 1998). Techniques to deal with the problems of reliability, which refers to the consistency of measurement (Schwab, 2004), include the test-retest method and the split-half method (Cohen et al., 2003; Gallagher, Ritter, & Satava, 2003; Peter, 1979). However, the limited size of this study's population of interest did not allow for these techniques. I chose to use another recommended method, which is to use established measures that have proven their reliability in previous research (Babbie, 1998). As such, many measures in this study were adapted from prior empirical studies, such as Miller/Covin and Slevin scale for EO (Covin & Slevin, 1989; Miller, 1995), Demov and Shepherd scale rating the strength of training (Dimov & Shepherd, 2005), dichotomous measures for the organizational structure (Baum & Oliver, 1991) and for a tie with professional associations (Aldrich & Zimmer, 1986a; Uzzi, 1997). These measures are discussed further in the subsequent section about variables. Furthermore, many of my survey items were scaled using 5-point Likert-type scales. This decision was made because research (Lissitz & Green, 1975) shows that Coefficient

alpha reliability with Likert scales increases up to the use of five points. Yet the question about affiliation with professional associations (“Is your organization currently affiliated with any of the following professional associations?”) used three items because 3-point Likert-type scales have also been found to produce adequate internal consistency (Hinkin, 1995).

The primary concern I had in generating survey items is content and construct validity. The case of this study is an emerging field, which lacks standardized definitions. The phenomena are not well understood without sufficient prior empirical studies, from which I could use established measures. Because definitions of constructs serve a key role in construct validation (Schwab, 2004), the condition in my case makes constructs more abstract and thus more difficult to be measured (Hinkin, 1998). To minimize potential biases and other issues affecting the accuracy of data, therefore, I followed Hinkin’s recommendation (Hinkin, 1995, 1998) to generate the preliminary items both deductively and inductively.

Deductive Method for Item Generation

Item generation should begin with a strong theoretical framework to assure content validity in the scales (Hinkin, 1995; Perry, 1996). Hence, my survey items were developed first in a deductive manner, starting with the conceptual dimensions identified in the literature review. Analysis of this study is based on EO and institutional theory. Also, SIFs have been discussed in the context relevant to philanthropy (as venture philanthropy), commercial investment (as social venture capital funds), social entrepreneurship (as funders), and rigorous measurement. Given these, the literature I

reviewed was selected from the following categories¹¹: (1) social entrepreneurship and social investment; (2) EO; (3) institutional theory; (4) nonprofit evaluation; and (5) venture capital and philanthropic foundations.

Inductive Method for Item Generation

The inductive method I took in generating survey items was based on content analysis of data from two types of sources. First, I conducted semi-structured interviews with three professionals from SIFs located in Indianapolis in June 2011. The interviews were very open-ended in nature. During interviews, the interviewees were asked to provide descriptions about a variety of practices in funding social ventures, measuring funding performance and outcomes, and managing the organization, as well as gathering the information about the organization such as structure, history, and human resources. Their responses were tape-recorded with the interviewees' permission, and transcribed. The interview data were then classified into a number of categories through an iterative, multi-stage content-analysis process (Guler, 2007; Nicholson & Anderson, 2005). First, the interview transcripts were reviewed to identify recurrent themes relevant to the study. I then open-coded the transcripts and broke them down into labels, such as

¹¹ Some reviewed studies are as follows: (1) social entrepreneurship and social investment (e.g., Anheier & Leat, 2006; Austin, Stevenson & Wei-Skillern, 2006; Battilana & Dorado, 2010; Bielefeld, 2009; Brainerd, 1999; Bugg-Levine & Emerson, 2011; Cohen & Winn, 2007; Dorado, 2006; Emerson, 2003; John, 2006; Kaplan, 2001; Katz, 2005; Kaplan, 2001; Letts, Ryan & Grossman, 1997; Ostrower, 2006; Urban Institute, 2006); (2) EO (e.g., Caruana, Ewing & Ramaseshan, 2002; Coombes, Morris, Allen & Webb, 2010; Covin & Slevin, 1988, 1989, 1991; Covin & Wales, 2012; Davis, Marino, Aaron & Tolbert, 2011; Helm & Andersson, 2010; Morris, Coombes et al., 2007; Lam et al., 2010; Pearce et al., 2010); (3) institutional theory (e.g., Ahlstrom & Bruton, 2006; Barreto & Baden-Fuller, 2006; Baum & Oliver, 1992, 1996; D'Aunno, Sutton & Price, 1991; Dart, 2004; DiMaggio & Powell, 1983; Echols & Tsai, 2005; Frumkin & Galaskiewicz, 2004; Guler, 2007; Heugens & Lander, 2009; Kostova & Roth, 2002); (4) nonprofit evaluation (e.g., Benjamin, 2010; Carman, 2011; Herman & Renz, 1999; Jackson & Holland, 1998; Kanter & Summers, 1987; LeRoux & Wright, 2010); and (5) venture capital and philanthropic foundations (e.g., Dimov & Shepherd, 2005; De Clercq and Sapienza, 2006; Fairfield & Wing, 2008; Fleishman, 2007; Frumkin, 2003, 2006; Grønbjerg, Martell & Paarlberg, 2000; MacMillan et al., 1988).

“entrepreneurial risk-taking attitude,” “satisfaction of members,” and “impact on society” (Corbin & Strauss, 2008).

The second source of data resulted from analysis of SIFs’ organizational materials, such as websites and annual reports, and descriptive survey reports of SIFs (Venture Philanthropy Partners, 2002). Content analysis of these materials was conducted by two coders, namely a doctoral student and myself, for the purpose of validity (Krippendorff, 2012). The use of the graduate student for the content analysis for scale development is validated by Hinkin (1995), because sorting is a cognitive task that requires intellectual ability rather than work experience (Schriesheim & Hinkin, 1990). Each coder reviewed the documents in a separate room and identified recurrent themes. These themes were coded with the frequency of the appearance in the Excel spreadsheets. I compared two documents to select eight items that two researchers pointed out as the most frequent themes exemplifying venture philanthropy practices and performance. These items were then used to develop a survey questionnaire. The first draft of the survey questionnaire was then reviewed by my dissertation committee members.

Methods Assessing Social Desirability and Other Biases

Although Likert-type scales are the most frequently utilized for survey questionnaires (Hinkin, 1998), they may also be subject to distortion by various causes including social desirability bias. Several strategies were implemented to attenuate response pattern biases in the survey study. The first method was to include negatively worded, reverse-scored items in the survey instrument (Idaszak & Drasgow, 1987). For this purpose, a philanthropic funding tool (i.e., grant) was utilized as a reverse-scored

item along with non-philanthropic funding tools (i.e., equity and loans) for the question about funding tools (“How often do you use each of the following funding instruments to fund social enterprises?”). At the same time, I limited the use of the reverse-scored item primarily to a question about funding instruments in my study, because research finds the frequent use of reverse-scoring of items may cause systematic error to a scale (Jackson, Wall, Martin, & Davids, 1993) and reduce the validity of questionnaire responses (Schriesheim & Hill, 1981).

Additional methods to remedy potential biases include differentiating modes of how survey questions were addressed (e.g., “How often do you use...?” “Is your organization...?”) and using mixed-mode surveys (Dillman, Smyth, & Christian, 2009). The subsequent section details the mixed-mode survey used for this empirical study. I worked closely with my dissertation committee members to assure that the statements were simple with familiar language to target respondents and that all items were consistent in terms of addressing only a single issue. Research (Holbrook & Krosnick, 2010) shows that tests through a computer provide a higher sense of neutrality and thus the Internet survey mode is less susceptible to social desirability response bias because of self-administration. Furthermore, the respondents were reminded that there were no right or wrong answers to the questions being asked of them, and they were guaranteed confidentiality (Covin et al., 1997). To motivate the respondents to participate seriously in the study, all respondents were offered summaries of the results.

Pretest

The deductively and inductively generated scale items were pretested from August to October 2011 to assess content validity (Hinkin, 1995, 1998). My study aims to capture variances in direct and moderating effects of EO and institutional environments on venture philanthropy practices. To meet this, my sampling needed to provide enough variation between these factors. Consequently, nine SIFs were chosen as the pretest participants in a purposive rather than random or stratified manner (Eisenhardt & Graebner, 2007; Kistruck & Beamish, 2010) to represent variety according to a number of *prima-facie* characteristics such as legal structure, size and age (Table 3.6). Availability of access to the organizations played an important part in the final choice of the case organizations. Semi-structured interviews along with a preliminary questionnaire were conducted.

During the pretest, several further variables were identified. Suggestions from the pretest participants were reflected in revising items in my questionnaire. For instance, a founder of a venture capital fund warned that other venture capitalists are very unlikely to disclose their organizations' financial data and that a survey containing questions about organizations' financial data will suffer a very low response rate. However, financial data, such as assets and operating budget, have been used as standard control variables in many nonprofit and EO studies (Guo & Brown, 2006; Wiklund & Shepherd, 2003; Wiklund, 1999). In particular because for-profit venture capitalists do not generally make their funds' data available to the public, it is imperative to obtain some sort of financial data through the survey. After consulting my committee members, I decided to include three survey questions about total assets, operating budget, and amount of

funding, respectively, in my survey instrument. However, these are multiple-choice questions asking respondents to choose the most applicable range of the financial data. These questions were pretested with for-profit SIFs. The information gathered from the entire process was used to complete the final version of the survey questionnaire for review by my dissertation committee members.

Data Collection Method

Main data for this study were collected via surveys during November 2011 through May 2012. Considering the possible difficulty of gathering data from foundation and venture capital executives, which is pointed out by many prior empirical studies (Miller & Wesley, 2010; Zacharakis, McMullen, & Shepherd, 2007), I utilized mixed-mode surveys composed of approaches in modes of online, mailing and phone contact and followed several suggestions by Dillman and his-coauthors (Dillman et al., 2009). To personalize the survey emails and letters, I collected target recipients' names and email addresses and confirmed their mailing addresses, referring to their websites, and databases and directories that I used to identify the sample organizations in the first place. The strategy was chosen because it helped to reduce coverage and non-response errors, lower the costs of data collection, and increase response rate (Dillman et al., 2009).

Data in this empirical study required an understanding about hands-on experience in funding decisions and the organization's structure and overall management. Therefore, the survey was addressed to an individual who was identified as a decision-making authority in funding decisions within each organization. For this purpose, chief executive officers (CEOs) were selected from small and mid-sized SIF organizations, which typically employ fewer than ten professionals and in which CEO is listed as one of the

Table 3.6. Pretested Organizations

Case	Type	Structure	Location	Funding year	Assets (2009)	Main funding tool	Funded social venture
1	Education fund	Nonprofit	Indianapolis	2007	\$5,486,045	Grant	U.S. nonprofit
2	Fund affiliated with IT venture	Nonprofit	Indianapolis	2002	\$1,150,677	Grant	U.S. nonprofit
3	Giving circle	Nonprofit	San Francisco	1998	\$1,228,300	Grant	U.S. nonprofit
4	Community foundation	Nonprofit	San Francisco	1990	\$1,174,000,509	Grant	U.S. nonprofit
5	Private foundation	Nonprofit	New York	1994	\$3,198,029	Grant	U.S. nonprofit
6	Community development financial institution	Nonprofit	New York	1995	\$5,732,313	Equity	U.S. for-profit
7	Venture capital fund 1 (greater social-intent)	Hybrid	San Francisco	1998	\$3,870,177	Equity	U.S. for-profit
8	Venture capital fund 2 (greater social-intent)	For-profit	San Francisco	2006	N/A	Equity	U.S. nonprofit/ for-profit
9	Venture capital fund 3 (greater finance-intent)	For-profit	Indianapolis	2004	N/A	Equity, loan, grant	U.S. for-profit

professionals in charge of their organization's funding and investment activities.

However, for organizations that have directors of funding and investment, I asked the directors rather than CEOs to respond to the survey.

Various researchers have noted the significant limitations of reliance upon a single reporter in research where the organization is the unit of analysis because his/her interpretation may not represent the views of other members of the organization

(Coombes, Morris, Allen, & Webb, 2011; Van Bruggen, Lilien, & Kacker, 2002).

However, several factors justify my decision to mail a questionnaire to a single respondent at each sample organization. First, a main purpose of this survey is to illuminate funding practices and management's entrepreneurial posture. No one but those with full knowledge of and responsibility for funding practices and organizational strategy can answer these research questions more precisely. Second, an organization's EO is typically operationalized from the perspective of its CEO (Wiklund & Shepherd, 2003). In large organizations, CEOs might be separated from 'how a firm operates' by layers of middle managers. However, this is less likely a problem for SIFs, which are in general small and medium-sized organizations. Third, my use of a single key informant approach is consistent with many prior studies (Covin & Slevin, 1989; Miller & Friesen, 1982; Zahra & Covin, 1995) that have collected measures of organization-level entrepreneurship from high-level executives, such as CEO and general manager. Research (Lumpkin & Dess, 1996) has argued that these executives are key decision makers in their organizations and appropriate respondents to surveys. Fourth, a possible reduction of the sample size is a serious concern about a multiple-participant method. Coombes et al. (2011) addressed multiple participants at each sample organization (i.e.,

executive director, board chairperson, and one random board member) and removed organizations from the analysis if they received less than two responses. This method is not suited to my study with a limited population size of case organizations.

All email correspondence and online surveys were administrated by an official survey center at Indiana University, the Center for Survey Research. First, an email message was sent to survey participants on November 4, 2011, to introduce this empirical study as a research project by the Center on Philanthropy at Indiana University (now known as Indiana University Lilly Family School of Philanthropy) and to outline the purpose of the study and the anticipated time commitment. Upon the recommendation by the director and consultant at the Center for Survey Research, our introductory email was signed by the Director of International Programs at the Center on Philanthropy, along with myself as a project manager. Considerable divergences exist in the main terminology used between organizations originating from traditional philanthropy (e.g., organizations identified by databases and resources primarily used among nonprofit and philanthropic funders such as the Foundation Center databases and Guidestar) and organizations actively involved in network associations constituting “impact investing” commercial investors (e.g., Social Capital Market Conferences). I created two groups based on these characteristics. The former group is called “the venture philanthropy group (VP),” and the latter, “the social venture capital group (SVC),” and I used different introductory messages tailored to each group. Each message included the terms and concepts that are familiar to the appropriate group in order to avoid confusion in our requests.

The Internet version of the survey was first sent to all 291 organizations on November 11, 2011, with a follow-up on December 6, 2011 and the final reminder on January 25, 2012. After three emails with the link to the Internet survey were sent out, I carried out the mail survey with organizations that had not participated in the survey from February 2012 to April 2012 but did not decline to answer. A pre-notice postcard was first mailed to 252 organizations. Then, the invitation letter and two follow-ups were mailed along with a business reply envelope and a copy of the survey questionnaire. As a follow-up and final reminder to increase the response rate (Dillman et al., 2009), telephone calls were placed to all non-responding organizations from April to May 2012, three weeks after the last mail survey was distributed. A graduate student made follow-up phone calls to determine if the addressees had received the questionnaire and if they intended to complete and return the material.

After a series of mixed-mode surveys, 146 responses were received with 19 undeliverable, which yielded a 53.7% response rate (Table 3.7). This response rate is considerably higher than that of other empirical studies targeting venture capitalists (20.7 percent in Miller & Wesley, 2010; 19 percent in Shepherd, 1999) and analyzing EO in the nonprofit context (22% in Davis, Marino, Aaron, & Tolbert, 2011; 26.3 percent in Helm & Andersson, 2010; 21% in Morris, Coombes, Schindehutte, & Allen, 2007). Hager and his co-authors document that a typical response rate in nonprofit research ranges from 26 to 50 percent (Hager, Wilson, Pollak, & Rooney, 2003).

Table 3.7. Calculating the Response Rate

Surveys sent out	291
Surveys that were returned due to inaccurate contact information	19
Surveys that were returned completed	146
Response rate: $146 \div (291 - 19)$	53.7%

Missing Value Treatment and Multiple Imputation Analysis

My review of data from 146 responses identified a considerable number of missing values in my dataset. Missing value theorists (Fichman & Cummings, 2003; Graham, 2009) consider more than 5 percent of missing values as significant, because this degree of missing values reduces the statistical power and causes biased statistical inferences in uncertain ways, in particular if missing data are not missing completely at random (MCAR), that is, missingness does not depend on the values of variables in the dataset subject to analysis (Rubin, 1976). Little's chi-square statistics (Little's MCAR test) identified my data as MCAR, as the result was not significant and thus could not reject the null hypothesis, which assumes that data are MCAR. (Chi-Square = 762.836, DF = 717, Sig. = .114). Several diagnostic tests were performed to determine which missing value treatment method is more appropriate in this study between multiple imputation and listwise deletion. The univariate statistics analysis was conducted to assess the extent of missing data, which are explained by the number and the percentage of missing values (Table 3.8). The results confirmed that the extent of missing data is not minimal (less than 5%), and thus, it is imperative to impute data in order to avoid biased estimates (Fichman & Cummings, 2003). Charts displayed from the Missing Value

Pattern Test and the Missing Value Pattern Charts also suggest that listwise deletion would lose much of the information in my dataset, and there are many values that would need to be imputed in order to achieve monotonicity.

After having consulted my dissertation committee members and a professor in the Department of Statistics at the University of North Carolina at Greensboro, I decided to use the multiple imputation method (Little & Rubin, 2002; Rubin, 1987, 1996) to treat missing values in this study. Proposed by Rubin (1987), a theoretical framework of multiple imputation is based on repeated imputations, each set of which is used to create a complete dataset through a Monte Carlo technique in which the missing values are replaced by $m > 1$ simulated versions (Schafer & Graham, 2002). This method replaces each missing value with a set of plausible values that reflect the uncertainty about the right value to impute.

Table 3.8. Univariate Statistics Results

	N	Mean	S.D.	Missing values	
				Count	%
Venture philanthropy practices	130	2.1059	.95933	17	11.6
EO	122	4.8497	.87126	25	17.0
Donor demand for social results	120	4.31	.858	27	18.4
Donor demand for financial results	120	2.89	1.321	27	18.4
Affiliation with Council on Foundations	117	.63	.857	30	20.4
Affiliation with National Venture Capital Association	108	.22	.569	39	26.5
Affiliation with other grantmaker associations	113	1.22	.933	34	23.1
Affiliation with other venture capital associations	91	.54	.847	56	38.1
Management team's work experience in nonprofits	123	4.30	.839	24	16.3
Management team's work experience in business	127	4.26	.838	20	13.6
Management team's education in nonprofits	123	3.610	1.0987	24	16.3
Management team's education in business	126	4.056	.9192	21	14.3

Missing value scholars argue that a multiple imputation method is superior to other methods, including listwise deletion, a widely used method to treat missing values (e.g., Little & Rubin, 2002; Little, 1988; Rubin, 1987, 1996; Schafer, 2010). If over 5 percent of data are missing, which is the case in this study, a loss of data through listwise deletion leads to larger sample errors, wider confidence intervals, and a loss of statistical power in testing hypotheses (Allison, 2001; Fichman & Cummings, 2003; Graham, 2009). The unconditional mean imputation for the missing cases has a variance of zero, and thus typically produces biased estimates of regression coefficients, even if the data are MCAR (Jones, 1996). Compared to those traditional missing value treatments, two modern methods, i.e., maximum likelihood and multiple imputations, yield unbiased parameter estimates with means, variances, covariances, correlations, and linear regression coefficients close to the true population value (Graham, 2009). That is, the estimates (1) are approximately unbiased in large samples (consistency); (2) are close to being fully efficient, having minimal standard errors (asymptotic efficiency); and (3) produce asymptotic normality (Allison, 2001; Fichman & Cummings, 2003). This empirical study conducts large multiple regression models with a small sample size. A multiple imputation method is more appropriate than a maximum likelihood method, because the former performs very well in small samples (as low as $N=50$), even with very large multiple regression models (as large as 18 predictors) and even with as much as 50% missing data in dependent variables (Graham & Schafer, 1999).

To ensure a proper procedure of multiple imputations, I followed suggestions from missing value theorists. Statistical analysis in my multiple imputations included all variables, dependent, independent and control (Allison, 2001), in the model that tests

effects both on venture philanthropy practices and on performance variables (Rubin, 1996). Dependent variables need to be included because leaving them out would yield regression coefficients that are attenuated toward zero (Landerman, Land, & Pieper, 1997). Furthermore, performance variables were treated as auxiliary variables for Study 1 and, a venture philanthropy practices variable, for Study 2, in my multiple imputation model, i.e., the variables that are not part of the model's substantive interest, but are highly correlated with the variables in the substantive model because inclusion of auxiliary variables in multiple imputation models may help get more accurate imputations (Graham, 2009). The number of datasets I used was five, since five datasets were usually found to be sufficient to get parameter estimates that are close to being fully efficient (Allison, 2001; Rubin, 1987). Fichman and Cummings (2003) suggest the datasets should be less than five, or sometimes as few as two or three. A procedure of multiple imputations also produced descriptive statistics for each variable with imputed value. I checked the results and corrected the imputation model if any negative values were generated through imputations. The mean values, standard deviations, and minimum and maximum values in each set of imputed values were confirmed to be roughly equal to those in the original data.

Nonresponse Bias Impact Assessment

When doing survey research, one potential threat to the findings is nonresponse error. Differences between the respondents and nonrespondents beyond sampling error result in nonresponse bias (Werner, Praxedes, & Kim, 2007). Sample surveys with low response rates can produce biased samples. The most commonly recommended

protection against this has been the reduction of nonresponse itself to increase the representativeness of the sample (Armstrong & Overton, 1977). The response rate of 53.7 percent in this study compares favorably with other studies in nonprofit and philanthropic research and entrepreneurship research.

However, raising the response rate does not necessarily reduce nonresponse error. High nonresponse rates can still yield low nonresponse errors if the difference between respondents and nonrespondents is small, whereas low nonresponse rates can yield high nonresponse errors if respondents and nonrespondents differ dramatically (Keeter, Miller, Kohut, Groves, & Presser, 2000). Thus, although greater response rates lower the probability of nonresponse bias, both empirical and theoretical evidence refuting nonresponse bias should be provided (Groves & Peytcheva, 2008).

Rogelberg and Stanton (2007) propose nine techniques as a nonresponse bias impact assessment strategy (N-BIAS). Some of the N-BIAS methods were not feasible in this study. For instance, the passive nonresponse analysis, which examines the relationship between passive nonresponse characteristics and standing on the key survey topics being assessed, requires additional questions on the survey that tap into factors relevant to passive nonresponse. Given that my survey instrument had as many as 19 questions for respondents to answer, this approach would be counterproductive. The wave analysis comparing late respondents to early respondents would not be appropriate, either, because I implemented mixed-mode survey methods. Early respondents and late respondents possibly responded to different survey modes. Research found responses vary by different survey modes (Sax, Gilmartin, & Bryant, 2003). Considering these limitations in my data to implement certain methods, I chose to use the archival analysis

to compare respondents to nonrespondents on variables contained in archival sources (Armstrong & Overton, 1977; Rogelberg & Stanton, 2007). Table 3.9 compares responding SIFs to nonresponding SIFs on variables for key organizational characteristics that may affect the pattern of survey responses (Tomaskovic-Devey, Leiter, & Thompson, 1994). As the mean values in Table 3.8 show, respondents and nonrespondents are remarkably similar on the variables, except those for revenue and asset sizes. However, discrepancies between respondents and nonrespondents do not automatically mean the existence of nonrespondent bias. To determine it, Independent Samples t-Tests (.05 level) were conducted for each variable. Results of t-test comparisons of all variables revealed no differences (i.e., $p > .05$) between these two subgroups. Thus, on these basic organizational attributes, the sample appears to be representative of the population from which it was drawn.

Table 3.9. Comparison of Respondents to Nonrespondents

Table 2B: Comparison of Respondents to Nonrespondents			
	Mean		<i>p</i> -value
	Respondents	Nonrespondents	
<i>Legal structure and age *</i>			
Nonprofit	1.2	1.2	.06
Age	21.8	22.3	.81
<i>Financial data</i>			
Revenue	9,219,722.1	55,287,168.9	.24
Assets	318,370,607.0	654,749,113.9	.39
<i>Geographic region *</i>			
Northeast	.34	.34	.99
North Central	.19	.17	.64
South	.16	.19	.54
West	.31	.30	.90

Two-tailed test

* Legal structure and geographic regions are based on dummy variables:

Legal structure: Nonprofit = 1; For-profit = 2

Geographic region: Applicable = 1; Not applicable = 0

Measures

This section explains definitions and operationalization of the dependent, independent, and control variables used in analysis. Table 3.15 also summarizes the measurement model latent variables, number of measurement items, measurement description and format, and Cronbach's alpha.

Dependent Variables

This empirical research constitutes two studies, each of which analyzes different sets of dependent variables in my dissertation research: (1) venture philanthropy practices, and (2) social and financial performance.

Venture Philanthropy Practices (Study 1)

The first dependent variable for this study is venture philanthropy practices measured by (1) the extent of an organization's use of five non-philanthropic funding tools, and (2) the extent of the SIF's participation on the board of a funded social venture. A five-point Likert-type scale ranges from 1 "Never" to 5 "Always" and is composed of six items: grant (a reversed-score item), equity, program-related investment (PRI), near-equity, loans, and participation on the board. Mean was used as an aggregated measure across six different items representing venture philanthropy practices, calculated by summing the score of each item, then dividing that sum by the number of items included in that sum. I chose mean, rather than sum, of the items because of a high degree of

missing values in funding tool items, which would severely skew the aggregated measure¹².

Due to a lack of empirical studies that operationalized venture philanthropy practices, it was imperative for me to identify the most appropriate way to operationalize venture philanthropy. This effort involved multiple steps. The following part of this section presents the steps that define and distinguish venture philanthropy practices.

The idea of venture philanthropy originates from a venture capital investment model, which involves five sequential steps: deal origination, deal screening, deal evaluation, deal structuring, and post-investment activities (Tyebjee & Bruno, 1984). Drawing upon this model, venture philanthropy has evolved into distinct behaviors. However, due to a lack of commonly accepted definitions, there is no standard method to operationalize venture philanthropy practices. Frumkin (2008) points out three core principles guiding a variety of venture philanthropy practices: (1) funding tools (provision of a large amount of financial support over longer periods of time); (2) new metrics of organizational performance; and (3) a close relationship between funder and recipient. As the first step to operationalize venture philanthropy practices, content analysis was conducted on publications about SIFs to identify key terms that represent distinct venture philanthropy practices.

The idea of venture philanthropy was first proposed by a *Harvard Business Review* seminal article about venture philanthropy (Letts et al., 1997), and then spread through many primary and secondary sources. Thus, the reviewed publications were identified based on the following criteria: (1) seminal publications featuring SIFs (e.g.,

¹² Multiple imputations were performed over the aggregated measure of venture philanthropy practices. Thus, when the variable was calculated, the data still had a high degree of missing values.

Table 3.10. Items Identified as Venture Philanthropy Versus Traditional Philanthropy by Literature Review

Principle	Traditional philanthropy	Venture philanthropy	Sources
Characteristics of funding tools	<ul style="list-style-type: none"> • Shorter funding term • Smaller amount • A philanthropic funding tool (grants) • Specific program support • Limited provision of technical assistance 	<ul style="list-style-type: none"> • Longer funding term • Larger amount • Market-based funding tools (e.g., equity, loans) • General operation support • Greater provision of technical assistance 	Acumen Fund (2013); Bill & Melinda Gates Foundation (2013); Clark & Gaillard (2003); Fleishman (2009); Frumkin (2008); John (2006); Letts et al., (1997); Miller & Wesley (2010); Omidyar Network (2013); Standlea (2006)
Performance measurement	<ul style="list-style-type: none"> • Less rigorous measurement • Measurement system developed primarily by a funded social venture • Less rigorous due diligence • No clear exit strategy 	<ul style="list-style-type: none"> • Rigorous measurement • New metric system developed by funders via adaptation of for-profit systems • Rigorous due diligence • A clear exit strategy 	Acumen Fund (2013); Community Wealth Ventures, (2002); Emerson et al. (2000); Fleishman (2009); Frumkin, (2008); Letts et al. (1997); Orosz (2000); REDF (2013); Standlea (2006)
Relationship with funded organizations	<ul style="list-style-type: none"> • Low involvement in a funded social venture • Not serve on the board 	<ul style="list-style-type: none"> • High involvement in a funded social venture • Serve on the board 	Community Wealth Ventures, (2002); Frumkin (2008); John (2006); Letts et al. (1997); Orosz (2000); Scarlata & Alemany (2008); Standlea (2006); Venture Philanthropy Partners (2013)

Community Wealth Ventures, Inc., 2002; Letts et al., 1997); (2) publications, including websites, generated by leading SIFs (e.g., Acumen Fund, REDF, Venture Philanthropy Partners); (3) industry reports; and (4) scholarly publications on venture philanthropy and case studies developed by academic institutions (e.g., Stanford Graduate School of Business/ REDF, 1998). Table 3.10 displays tools and behaviors identified as venture philanthropy versus traditional philanthropy through content analysis on those documents.

The next step was to review and sort these behaviors with three professionals from SIFs located in Indianapolis and industry experts who made suggestions during the process of my scale item generations. Nine organizations participating in the pretest also reviewed the items. An important objective during this sorting process was to delete items that were deemed to be conceptually inconsistent and not distinct enough as venture philanthropy practices (Hinkin, 1995). As a result, many items needed to be deleted. Although performance measurement has been discussed as one of the most important characteristics of venture philanthropy approaches, some reviewers expressed a concern about potential confusion among survey respondents, because even before a venture philanthropy idea emerged, organizations such as the United Way had begun to implement their own measurement tools to assess nonprofit funding practices. A long funding term and a large size of funding support were also excluded. Although these are widely acknowledged as unique venture philanthropy approaches (Letts et al., 1997), it is not possible to define what “long term” and “large size” mean. Contrary to the claim by venture philanthropy proponents, research found many traditional philanthropic foundations provide multi-year grants (Grønbjerg et al., 2000). Given the absence of a

metric that defines a typical duration of venture philanthropy approaches compared to traditional philanthropy approaches, this item would not be able to help me distinguish venture philanthropy from traditional philanthropy.

The sorting and review processes yielded (1) funding tools, (2) a funder's close relationship with a funded organization through the board seat, and (3) types of support including provision of non-financial technical assistance as variables that exemplify venture philanthropy practices. As the last step to operationalize venture philanthropy practices, scale reliability was assessed since this is a newly developed measure (Hinkin, 1995). Table 3.11 shows a low Cronbach's alpha for a scale including all items of funding tools, a close relationship, and provision of non-financial resources ($\alpha = .61$). The scale excluding an item for provision of non-financial resources received a higher Cronbach's alpha ($\alpha = .68$), but it is still lower than .70 as recommended by Nunnally (Nunnally, 2010). After deleting an item for loans through PRIs, the scale could attain an acceptable level of Cronbach's alpha ($\alpha = .72$).

Table 3.11. Results of Scale Reliability Assessment for Venture Philanthropy Practices

Funding tools	Close relationship	Types of support	Cronbach's α
6 tools (grant, equity, equity through PRIs, near-equity, loans through PRIs, loans)	Participation on the board	Provision of non-financial resources	.61
6 tools (grant, equity, equity through PRIs, near-equity, loans through PRIs, loans)	Participation on the board	N/A	.68
5 tools (grant, equity, equity through PRIs, near-equity, loans)	Participation on the board	N/A	.72

Social and Financial Performance (Study 2)

Study 2 has two dependent variables—social performance and financial performance—each of which is analyzed by a different model. I ascribe to the view that performance is multidimensional in nature and thus requires the use of multiple measures (Cameron, 1978; Chakravarthy, 1986; Wiklund & Shepherd, 2005). This is particularly true for social performance, because each nonprofit and philanthropic organization has its own unique social objectives, which will likely differ from those of other philanthropic organizations (Frumkin, 2008; Kanter & Summers, 1987; Kendall & Knapp, 2000). In the case of performance of nonprofit organizations, it is conceivable that different performance items could move in opposite directions. Different social performance indicators, for example, could influence outcomes. Although the number of served students might be small (quantitative outcome), students may increase self-esteem to a significant degree (qualitative outcome). Or, as financial performance indicators, donation revenue may decline even when sales revenue is increasing because donors may think their donations are no longer necessary given the success of a nonprofit's commercial activity. Yet, in either case, both dimensions are important indications of performance and the overall success of the organization. Therefore, a multiple dimension performance measure provides a better test to the overall performance of the organization. I also incorporated organizations' mission, goals and objectives, short-term and long-term outcomes, public and private benefits, and other elements of broader stakeholder satisfaction (Lumpkin & Dess, 1996).

As discussed earlier in this chapter, several methods were utilized to generate and develop dimension items and they were integrated into social performance and financial

performance. Dimension items about performance were first derived from content analysis (as explained earlier in this chapter). The primary source reviewed for content analysis are two survey reports compiled on behalf of one of the leading SIFs, Venture Philanthropy Partners (Community Wealth Ventures, 2000, 2002). These documents provide details of SIF funding performance, goals, and outcomes. Two coders, including myself, conducted content analysis on the documents to identify concurrent themes and keywords relevant to definitions and the assessment of SIF funding performance. I also reviewed the websites of my sample organizations as another primary source and scholarly studies as the secondary source to determine that the common themes identified were consistent. The secondary sources reviewed include studies about nonprofit and philanthropy performance (see Table 3.12). Following the prior literature (e.g., Westphal, 1998), the semi-structured interviews were also conducted with SIF practitioners and scholars. Each reviewer was asked to provide descriptions about how he or she defines performance and what factors possibly help him or her enhance performance. Their responses, as well as secondary sources, were then classified into a number of items by content analysis.

As a result, a social performance variable was constructed from eight different items representing (1) meeting the needs of beneficiaries, (2) the number of beneficiaries served, (3) concrete outputs for beneficiaries, (4) scalability of funded programs, (5) advancement of the social cause by influencing policymakers and the public, (6) long-term social impact, (7) alignment with mission, and (8) donor and investor satisfaction. A financial performance variable was constructed also from eight different items representing four different indicators of funded social ventures' revenues: (1) total

revenue, (2) earned income/sales revenue, (3) philanthropic donations/grants, (4) growth in net assets, (5) another institutional funder's acquisition of funded social ventures, (6) initial public offerings of funded social ventures, (7) internal rates of returns, and (8) direct financial benefits for survey participants or their donors/investors. Survey respondents were asked about the importance of social and financial performance items and their satisfaction with each item.

I used the performance scales employed by Covin, Slevin and Schultz (1997) and Sherwood and Covin (2008) to construct weighted average social and financial performance scores for the sampled organizations. Consistent with the recommendations of Covin, Slevin and Schultz (1997), the "raw" satisfaction data is recorded to -2 to +2 scale, which ensures that higher scores will be calculated for responses indicating greater satisfaction. Each performance index is then created by summing the importance of satisfaction scores for each of the social and financial items, then dividing this figure by the sum of importance scores.

$$\text{Performance} = \frac{\sum (\text{Criterion Satisfaction Score} \times \text{Criterion Importance Score})}{\sum (\text{All Criteria Importance Scores})}$$

Relevant data are gathered via a survey. Subjective indicators were chosen, because subjective measures are particularly useful for assessing the broader, nonfinancial dimensions of performance, which are generally more accessible than objective indicators. As the prior studies demonstrated (Stam & Elfring, 2008), the social performance scale and the financial performance scale in this study are shown to exhibit strong reliability and validity. Cronbach's alpha of social performance is $\alpha = .81$ and that of financial performance is $\alpha = .89$

Table 3.12. Performance Variables: Conceptualization and Measurement in Selected Studies About Nonprofit and Philanthropic Organizations

Authors	Social performance	Financial performance
Alter (2004)	Outcomes relating to employment, education, wages, housing, use of public assistance, use of social services, reduced medical needs, increased quality of life, or changes in behavior and attitudes	Financial self-sufficiency via earned income, income diversification, and cost savings
Coombes, Morris, Allen, & Webb (2011)	Eight areas related to the social mission (e.g., participation with school/educational program, overall influence on cultural development within the local community)	Total revenues, net assets, and fundraising ratio
Frumkin (2008)	Process evaluation (program implementation, the capacity of the organization to achieve objectives), outcome evaluations (results that a program ultimately achieves)	N/A
John (2006)	Mission outputs, client satisfaction, internal processes, employee learning and growth	Financial indicators
Kaplan (2001)	Specific targets for increasing the scope of social impact (e.g., the number of customers/clients served, expansion to new sites), customer satisfaction	Increased revenue, income stability
Katz (2005)	Indicators about how much influence a foundation has in its field	Indicators about whether grantees have been strengthened or whether a funder is able to persuade other funders to fund its grantees
Morris, Coombes, Schindehutte, & Allen (2007)	N/A	Total revenues and net assets
Ostrower (2006)	Influencing social policy	Organizational development providing nonfinancial technical assistance

Table 3.12. (cont.)

Authors	Social performance	Financial performance
Pearce, Fritz, & Davis (2010)	Member attendance	Total dollars given by members
Whitman (2008)	Various social values	Indicators about how well it makes resource allocation decisions in line with its espoused social values

Independent Variables

Entrepreneurial Orientation

Entrepreneurial orientation (EO) in this study is measured by the Miller/Covin and Slevin scale (1989), a 7-point/9-item Likert-type scale that assesses three items for each of three subdimensions of EO—innovativeness, risk taking, and proactiveness—at the organization level. The subsequent section explains the steps to develop a scale to assess EO for this study. Cronbach's alpha for this final scale is 0.82, which is greater than the minimum recommended level, 0.70 (Hinkin, 1995).

Recent studies show an increased interest in EO among nonprofit scholars and their active application of a concept and a scale of EO to the nonprofit context (Helm & Andersson, 2010). In order to determine how this study applies an EO scale, I consulted one of my committee members who has developed the most widely used scale to measure EO (Covin & Slevin, 1989). Table 3.13 explains that most prior studies adapted the Covin and Slevin (1989) scale with some modifications appropriate to their empirical cases, while Morris and his co-authors developed their original scales for their studies' organizations (Coombes et al., 2011; Morris et al., 2007; Morris & Joyce, 1998). Covin and Wales (2012) also introduced to me Hughes and Morgan's (2007) scale to measure five dimensions (autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness) reflecting the multidimensional EO construct (Lumpkin & Dess, 1996). Another committee members who specializes in philanthropic studies, and three professionals from an Indianapolis-based SIF reviewed the original Miller/Covin and Slevin scale, Hughes and Morgan's (2007) scale, and the scales used by other empirical studies listed in Table 3.12.

During their review, Hughes and Morgan's (2007) scale was first eliminated because SIF professionals stressed that “competitive aggressiveness” is not a correct term to assess their practice (“We do not compete with other organizations; instead we collaborate with them.”) The reviewers expressed their concerns about the use of the Helm and Andersson scale (2010), the Morris and Joyce scale (1998), and the Pearce, Fritz and Davis scale (2010) due to the large number of items in these scales. Some scales have increased the number of items up to as many as 15 items from 9 items in the original Covin and Slevin scale. Research suggests that scales with too many items can create problems with respondent fatigue or response biases (Anastasi & Urbina, 1997). Unlike the questionnaires used by these studies, my questionnaire includes many other scales. Considering that adequate internal consistency reliabilities can be obtained with as few as three items (Hinkin, 1995), it is not necessary to increase the number of items in a scale for the purpose of reliability. Our review process determined that the original Covin and Slevin scale (1989) should be used as a foundation.

The Covin and Slevin scale was then pretested by nine case organizations. While all pretest participants confirmed the scale is applicable in the context of this study, they also suggested that wordings in many scale terms needed to be modified because the original scale had been developed with for-profit firms. Suggestions from participants in the pretest were discussed with my committee member who specializes in EO research and reflected in revisions in the scale items. For instance, “firm” was replaced with “organization,” which is a more familiar term in the nonprofit and philanthropic field. Given that my intended survey respondents are funders, rather than direct service providers, “funding programs” was chosen to replace “products or services.” In light of

suggestions by SIF professionals, one of the proactiveness items (“Typically adopts a very competitive, ‘undo-the-competitors’ posture”) needed to be revised because the item contained the concept of “competition.” The final item reads as “Continuously makes changes, due to perceived changes occurring in the community we serve.”

Institutional Regulative Pressure (1): The Legal Structure of SIFs

Following an approach by Baum and Oliver (1992), the legal structure of an SIF is measured as either nonprofit (coded as 1) or for-profit (coded as 0) and analyzed as a dummy variable in regression analysis. The use of binary variables for the legal structure is a commonly accepted measure in comparative studies on nonprofit versus for-profit organizations (Davis et al., 2011). The survey questionnaire asked respondents to pick one of the following items as the most applicable legal status that structures their organizations: “Public charity 501(c)(3)”; “Limited liability company, limited partnership, or other business firm”; “Other structure”; and “Unincorporated.” The questionnaire also asked respondents who chose “Other structure” to further describe their organizations’ structure. Most respondents explained their organization as a “private foundation,” which should be classified as “Public charity 501(c)(3)” for the purpose of this study. After a review of those descriptions, I allocated each case to an appropriate category, either nonprofit or for-profit. Additionally, I used the National Center for Charitable Statistics database, the Guidestar database, and organizations’ websites, if any, to confirm the legal structures of my survey participants.

Table 3.13. Selected Empirical Studies Applying EO in the Nonprofit Context

Authors	Sample	EO dimensions	Methodology	EO scale adapted
Cools & Vermeulen (2008)	1,797 commercial entrepreneurs and 150 social entrepreneurs in Flemish organizations	Innovativeness, risk taking, proactiveness	Independent sample <i>t</i> tests	A 10-item/ 5-point Likert scale adapted from Covin & Slevin (1989) and Miller & Toulouse (1986)
Coombes et al. (2011)	725 arts and culture nonprofits (the final sample was 140 nonprofits)	Innovativeness, risk taking, proactiveness	ANOVA	A scale by Morris & Joyce (1998) and Morris et al. (2007)
Davis et al. (2011)	670 nursing homes in Florida (the final sample was 134 nursing home administrators)	Innovativeness, risk taking, proactiveness	Generalized linear model	An 8-item/7-point Likert scale adapted from Covin & Slevin (1989)
Helm & Andersson (2010)	410 entrepreneurial and non-entrepreneurial nonprofits in Kansas City (the final sample was 108 organizations)	Innovativeness, risk taking, proactiveness	Principal components factor analysis	A 20-item/8-point Likert scale adapted from Covin & Slevin (1989)
Morris, Coombes, Schindehutte, & Allen (2007)	685 social service nonprofits in Upstate New York (the final sample was 145 nonprofits)	Innovativeness, risk taking, proactiveness	Exploratory and confirmatory factor analyses	A 15-item scale by Morris & Joyce (1998)
Morris & Joyce (1998)	Managers and staff from 19 blood centers attending trade conferences	Innovativeness, risk taking, proactiveness	Factor analysis	A 14-item original scale
Pearce, Fritz, & Davis (2010)	252 religious congregations in St. Paul, MN, Philadelphia and Pittsburg, PA, Lincoln, NE, and Charlotte, NC	Innovativeness, risk taking, proactiveness, competitive aggressiveness, autonomy	Regression analyses	A 15-item/7-point Likert scale adapted from Covin & Slevin (1989)

Institutional Regulative Pressure (2): Donors' and Investors' Demand for Social Versus Financial Outcomes

A donors' and investors' demand variable is measured by the extent of their demand for social or financial outcomes from funding. A 5-point Likert-type scale asked survey respondents "to what extent your funders/investors expect social and financial returns" and provided a rating ranging from 1 "Do not expect at all" to 5 "Very strongly expect." This is a single-item scale and separate scales were prepared for social outcome and for financial outcome. Schriesheim, Hinkin and Podsakoff (1991) caution that a single-item scale may lack content and construct validity, internal consistency and test-retest reliability. However, this single-item scale has been widely accepted to assess funders' goals and investors' demand by prior literature on SIFs (Clark & Gaillard, 2003; Miller & Wesley, 2010). Schriesheim et al. (1991) also mention that it is perhaps more preferable to use a thoroughly developed measure with conceptually consistent items than a multi-item scale. Thus, as recommended by Hinkin (1995), both inductive and deductive methods were applied to the development of the donor/investor demand scale in order to enhance its construct validity.

Institutional Normative Pressure (1): Affiliations with Professional Associations

Following the conceptualization by Aldrich and Zimmer (1986), an independent variable for affiliations with professional associations is measured as a presence or an absence of a formal and/or informal tie with professional associations.

A concept of embeddedness is often used to refer to the interconnections between an organization and social structures of a particular institutional field when it exists

(Baum & Oliver, 1991; Burns & Wholey, 1993; Dacin, 1997; DiMaggio & Powell, 1983; Granovetter, 1985; Gulati, Nohria, & Zaheer, 2000). Scholars construct network embeddedness in different ways. For instance, Gulati and Gargiulo (1999) operationalize embeddedness at two different levels as (1) relational embeddedness as the number of alliances a pair of organizations had entered with each other, and (2) structural embeddedness as the number of common partners they shared from past ties. Echols and Tsai (2005) implemented Burt's (2009) network redundancy measure to calculate the network embeddedness that represents the interconnectedness of each organization's contacts within its own dataset. These methods often require survey respondents to provide the information of their relationships with other organizations (Stam & Elfring, 2008; Wasserman & Faust, 1994). With the considerable difficulty scholars experienced in collecting responses from foundations and venture capitalists, those methods would not be deemed to present sufficient data for my analysis.

However, some prior studies used a simple measure. The simplest measures of interconnectedness between organizations is exemplified by the presence or absence of a tie (Aldrich & Zimmer, 1986b). This simple measure was applied by Uzzi (1996), who created a dichotomous variable representing social capital embeddedness. The present study follows these approaches to construct affiliation variables. In agreement with DiMaggio and Powell's conceptualization that the interconnectedness between organizations occurs through both formal and informal means (1991), I measured three levels of affiliations with professional associations, i.e., "Formal affiliation" (coded as 3), "Informal affiliation" (coded as 2), and "No affiliation" (coded as 1). "Formal affiliations" mean affiliations by formal membership with an association, whereas

“informal affiliations” are any other types of affiliations, including participation in a seminar or conference organized by a professional association, informal networking, and affinity groups. I further created a different item representing a leading professional association at the national level (i.e., “the Council on Foundations” in the philanthropic field and “National Venture Capital Association” in the venture capital field) and professional associations at the local level (i.e., “Other grantmaker association(s)” in the philanthropic field and “Other venture capital association(s)” in the venture capital field).

Consequently, two scales were developed: the one for affiliations in the philanthropic field, and the other, in the venture capital field. An aggregated measure is calculated by summing scores from two items in each scale. For instance, if an organization is formally affiliated with the Council on Foundations (= a score of 3), but has only an informal relationship with a local grantmaker association (= a score of 2), the variable measuring this organization’s affiliations with professional associations in the philanthropic field is 5 ($3 + 2$).

Institutional Normative Pressure (2): Management Team’s Training

A management team’s training is measured by the strength of training that members of the management team collectively had in the nonprofit versus the business sectors. The following section describes the steps I took in order to construct the training variable.

Construction of a variable measuring the management team’s training is far from an easy task, because prior literature of institutionalism and human capital theory defined and measured training and experience in many different ways. Therefore, I reviewed

major empirical studies measuring training as a variable (Table 3.14). Following many studies listed in Table 3.14, I constructed variables to capture two dimensions of training—educational training and professional experience—of the management team. A use of both educational training and professional experience in the measure is consistent with the implication made by DiMaggio and Powell (1983). Human capital literature (Dimov and Shepherd, 2005; Gimeno, Folta, Cooper, & Woo, 1997) distinguishes general human capital, and specific human capital that refers to education and experience, with a scope of application limited to a particular activity or context. Since my empirical analysis needs to illuminate differences between the philanthropic field and the venture capital field, I focused on measuring specific human capital. To capture specific human capital as a source of institutional influences, I used commonly accepted names for degrees in higher education today: “philanthropy, nonprofit management, or public administration” from the traditional philanthropic field and “business administration” as specific human capital with regard to the venture capital field.

In the final version of the scale, survey respondents were asked how they rated the work experience and educational training of their leadership team collectively in each of the following fields: (1) philanthropy, nonprofit management, or public administration, (2) business administration, (3) subject fields (e.g., environment, energy, health, arts, education, history), and (4) other. A “subject fields” item and an “other” item were added upon suggestion from a respondent during the pretest, who cautioned that some respondents, who hold a degree in another field, might skip answering this question without picking either nonprofit management or business administration. Following Letts et al. (1997), which implies that traditional philanthropic foundations tend to hire

program officers who had training in a specific subject field, I allocated a score for a “subject fields” category to “philanthropy, nonprofit management, or public administration.” To create a variable that would capture the strength of the management team’s education and work training, I referred to a Dimov and Shepherd 5-point Likert-type scale (2005). Each of the training variables was scaled from 1 to 5 with the training strength ranging from 1 “None” to 5 “Extremely strong.” “1” indicated a respondent rated “none” as the strength of his/her leadership training in a particular field; “2” represented “very little” training, and “5” indicated “extremely strong” training. The subscales for work experience and educational training were summed to form a composite training scale in a nonprofit versus business field, in which those with high scores had both depth and breadth of experience.

In the entrepreneurship literature (Table 3.13), work experience has been commonly measured as the number of years of experience, or signaled by achievement levels in employment, such as management or supervisory experience (Ang, Slaughter, & Ng, 2002; Davidsson & Honig, 2003; Honig & Karlsson, 2004). Educational attainment has often been captured by the highest educational degree, which is also coded by the number of years (Wilson & Musick, 1997). Given these practices in prior literature, I included scales measuring the number of years of experience each member of the leadership team possessed as an indicator for the strength of his/her educational and professional training. However, the pretest results suggested that this method would severely decrease the response rate; most respondents could not answer for the training scales because they needed to ask their CEOs and board members to complete their response. I consulted my committee members in regard to seeking the most appropriate

method to capture the information I would need for analysis on the leadership team's training, and determined that the rating system measuring the depth ("none" through "extremely strong") and the breadth ("work experience" and "educational training") would be the most appropriate for my empirical study. My decision was made also because as Table 3.13 exhibits, many institutionalism and philanthropic studies use relatively simple measures, such as a binary or categorical variable. The coefficient alpha for the scales is 0.73, which suggests that the sampling domain has been captured adequately (Churchill, 1979).

Table 3.14. Selected Empirical Studies Measuring Human Capital

Authors	Sample	Theoretical foundation	Methodology	Measure
Ang, Slaughter & Ng (2002)	1576 IT professionals in Singapore	Institutional theory	Hierarchical regressions	<ul style="list-style-type: none"> • <i>Education</i> (a set of binary variables with associate's or bachelor's IT-related degree) • <i>Work experience</i> (total years that the individual has held any IT job)
Casile & Davis-Blake (2002)	347 AACSB unaccredited business schools	Institutional theory	Ordered probit regressions	<ul style="list-style-type: none"> • <i>Work experience</i> (a binary variable indicating a dean's previous employment by an AACSB-accredited institution)
Chandler & Hanks, (1998)	102 manufacturing and service firms	Entrepreneurship	ANOVA	<ul style="list-style-type: none"> • <i>Work experience</i> (total years of experience in managing own businesses, as a general manager in a business owned by someone else, and/or in a technical position)
Davidsson & Honig (2003)	380 Swedish adults engaged in nascent activities with a control group of 608 non-entrepreneurs	Entrepreneurship	Binomial logistic regression	<ul style="list-style-type: none"> • <i>Education</i> (the highest level of education coded into number of years) • <i>Workshop attendance</i> (a binary variable to indicate attendance) • <i>Work experience</i> (total years of full-time paid work experience) • <i>Supervisory experience</i> (total years of experience)
Dimov & Shepherd (2005)	112 venture capital firms	Entrepreneurship	Hierarchical regression	<ul style="list-style-type: none"> • <i>Education</i> (a score for each of the degrees to represent the proportion of management team members that attained MBA, law, science, and/or humanities degree) • <i>Industry experience</i> (a score for each type of experience based on the proportion of management team members who worked in finance, consulting, and/or law and had entrepreneurial experience)

Table 3.14. (cont.)

Authors	Sample	Theoretical foundation	Methodology	Measure
Forbes & Zampelli (2012)	1,539 individuals (data from the 2006 Social Capital Community Survey)	Philanthropic and nonprofit studies	Tobit	<ul style="list-style-type: none"> • <i>Education</i> (6 binary variables representing the highest education levels achieved) • <i>Health status</i> (a binary variable to indicate whether or not a respondent is disabled)
Gimeno, Folta, Cooper & Woo (1997)	4,814 members of the National Federation of Independent Business	Entrepreneurship	Tobit, grouped data regression	<u>General human capital</u> <ul style="list-style-type: none"> • <i>Formal education</i> (percentage of observations in sample with less formal education) • <i>Management experience</i> (multinomial categorical variable for the highest level of supervisory, management, and entrepreneurial experiences) <u>Specific human capital</u> <ul style="list-style-type: none"> • <i>Similar business experience</i> (a binary variable to indicate similarity between present business and previous organization)
Honig & Karlsson (2004)	396 verified and accessible nascent entrepreneurs	Entrepreneurship	Hierarchical logistic regression	<ul style="list-style-type: none"> • <i>Education</i> (total years for the level of education completed) • <i>Work experience</i> (total years for full-time paid work experience) • <i>Start-up experience</i> (a dummy variable)
Wilson & Musick (1997)	2,854 individuals (data from the Americans' Changing Lives panel study)	Philanthropic and nonprofit studies	OLS regression	<ul style="list-style-type: none"> • <i>Education</i> (total years of schooling completed)

Control Variables

The model included three control variables: (1) SIFs' age, (2) SIFs' size, and (3) the legal status of funded social ventures. These control variables are designed to adjust for institutional field and organizational differences that might impact the association between the measures of interest (Davis et al., 2011) and strategy-making processes (Lumpkin & Dess, 1995). Age and size are also standard control variables often used in the literature of EO (Pearce et al., 2010; Stam & Elfring, 2008; Wiklund & Shepherd, 2005), neo institutionalism (Baum & Oliver, 1992), and philanthropic studies (Guo & Brown, 2006).

I explored a possibility of using other control variables, in particular locations. Venture philanthropy literature often discusses the location as an important characteristic, since in the early stages, main thought leaders for venture philanthropy were known to be high-tech entrepreneurs located in the Silicon Valley area (Moody, 2008). Also, community climate in favor of venture capital and entrepreneurial activities can help promote venture philanthropy practices, since venture capital investment is a familiar practice and thus will be deemed to be legitimate. A venture-capital-friendly climate can be measured by the degree of concentration of venture capital firms in a particular region. I reviewed the data on Investments by Region in the *MoneyTree Report* (2010), the report compiled through collaboration between PricewaterhouseCoopers and the National Venture Capital Association based upon data from Thomson Reuters. The concentration was calculated by the number of deals and amount for total deals, instead of the number of venture capital firms. However, the results showed the same level of concentration among Silicon Valley, the Midwest, and the Northeast (score = 13) and indicated that the

location would not be a useful index for testing my hypotheses. It was also noted by the pretest participants that as the field has been growing, some SIFs have opened offices in multiple locations. Given these data, location was eliminated from this empirical study.

Organization Age

I computed age by using 2012, the year when the survey was conducted, minus the year the organization was founded. The majority of the founding year data was collected through the survey questionnaire, while Guidestar and the National Center for Charitable Statistics (NCCS) National Nonprofit Database were used as the secondary source for obtaining the ruling years for nonprofit sample organizations.

Age was controlled for the effect of organizational reputation and linkage in the institutional field. Long-standing foundations are more likely to be deeply embedded in the traditional philanthropic field than SIFs created by high-tech entrepreneurs during the dot-com era (Moody, 2008). The high degree of embeddedness can constrain those funders from implementing non-traditional activities (Kistruck & Beamish, 2010; Mair & Martí, 2006). As such, age can be an indicator for the degree of influence within the high-tech and entrepreneurial culture, which then can affect the organization's use of venture philanthropy approach.

Organization Size

Size was determined based on one of the four ranges of total assets ("less than \$1 million," "\$1 million to less than 10 million," "\$10 million to \$1 billion," "over \$1 billion"), from which the survey questionnaire asked respondents to pick one. For the

regression model, the mid-point value was computed for each range. Due to a considerably large range between the minimum size and the maximum size, I used log for the asset size.

To account for an organization's size, I considered a number of measures. Prior research indicates a relationship between organization size and strategic behavior in entrepreneurial organizations (Chen & Hambrick, 1995). Organization size is often measured as the total number of employees within the organization (Kreiser, Marino, Dickson, & Weaver, 2010) or financial data, such as revenue or assets. This study's survey questionnaire asked respondents about both the number of employees and the size of assets, revenue and operational budget. My review of the collected data, however, suggested the number of employees would not be an accurate indicator describing an organization's size because a considerable number of nonprofit SIFs were found to rely on volunteer labor.

The Legal Structure of Funded Social Ventures

The legal status of social ventures that a responding SIF funded is operationalized as either nonprofit (coded as 1) or for-profit (coded as 2) and is included as a dummy variable in the regression model. I controlled the legal status of funded social ventures because the for-profit status of funded ventures allows funders to use equity investment as a funding tool, whereas the nonprofit status does not. As such, a different legal status of funded social ventures directly impacts the ability to use market-based funding tools.

Table 3.15. A Summary of Measure for Dependent, Independent, and Control Variables

Variable	Measure	Cronbach's alpha	Reference for measure	Level of measurement
<i>Dependent variable</i>				
Venture philanthropy practices	The extent of (i) use of venture capital funding tools, and (ii) participation on the board of a funded social venture, measured by a 5-point Likert scale	.72	(Original scale)	Scale score, interval
Social performance	Funder's (i) stated values of the importance of social performance items and (ii) stated satisfaction with each item, whether it met its values and satisfaction	.81	Covin, Slevin & Schultz (1997)	Scale score, interval
Financial performance	Funder's (i) stated values of the importance of financial performance items and (ii) stated satisfaction with each item, whether it met its values and satisfaction	.89	Covin, Slevin & Schultz (1997)	Scale score, interval
<i>Independent variable</i>				
EO	The level of entrepreneurial posture of the leadership team, measured by a 7-point Likert scale	.82	Covin & Slevin (1989)	Scale score, interval
Institutional regulative pressure (1): The legal structure	Legal structure, nonprofit versus for-profit	N/A (Dummy variable)	Baum & Oliver (1992)	Bivariate
Institutional regulative pressure (2): Donors' and investors' demand for funding outcomes	The extent of donors' and investors' demand for social versus financial outcomes, measured by a 5-point Likert scale	N/A (Single item)	Clark & Gaillard (2003)	Scale score, interval
Institutional normative pressure (1): Affiliation with professional associations	The depth (formal/informal) and the extent of affiliation with professional associations in the philanthropic versus venture capital field, measured by 3-point Likert scale	N/A (Single item)	Aldrich & Zimmer (1986), Uzzi (1996)	Scale score

Table 3.15. (cont.)

Variable	Measure	Cronbach's alpha	Reference for measure	Level of measurement
Institutional normative pressure (2): The management team's training	The extent of the management team's education and work training in nonprofit versus business, measured by a 5-point Likert scale	.73	(Original scale)	Scale score, interval
<i>Control variable</i>				
Age	The survey year (2012) minus the respondent organization's founding year	N/A (Single item)		Scale score, interval
Size	The asset size determined by the midpoint of one of the four asset ranges	N/A (Single item)		Scale score, interval
The legal structure of funded social venture	Legal structure of funded social ventures, nonprofit versus for-profit	N/A (Dummy variable)		Bivariate

Analytical Approach

Moderated hierarchical regression analysis was utilized as the main statistical procedure for testing my hypotheses. Moderated regression analysis allows for a comparison between alternative models with and without interaction terms, where an interaction effect only exists if the interaction term contributes significantly to the variance explained in the dependent variable over the main effects of the independent variables (Jaccard & Turrisi, 2003). This analytical approach has been widely employed in many empirical studies testing the interaction between EO and environmental or internal factors (Barringer & Bluedorn, 1999; Bhuian et al., 2005; Covin et al., 1997; Covin & Slevin, 1988, 1989; De Clercq, Dimov, & Thongpapanl, 2010; Dess et al., 1997; Stam & Elfring, 2008; Wiklund & Shepherd, 2003, 2005; Zahra & Covin, 1995). This empirical study follows the approach by these prior studies. Yet, there are several other reasons why I chose moderated hierarchical analysis over other analytical methods.

First, my hypotheses indicate that the relationships between independent variables (institutional pressures) and dependent variables (venture philanthropy practices, social and financial performance) are conditional upon the level of organizations' EO. As such, the outcome of my analysis will be jointly determined by the interaction of the predictor and the moderator. This suggests that my hypotheses reflect the form of moderation, and thus, moderated regression analysis is an appropriate technique (Arnold, 1982; Sharma, Durand, & Gur-Arie, 1981). If hypotheses investigate that a predictive ability of certain variables differs across different environments, subgroup analysis should be used because this hypothesis reflects the magnitude, not the form, of moderation (Venkatraman, 1989). Second, the interactions this study investigates are continuous variables. Cohen et al.

(2003) state that ANOVA should be avoided to examine continuous variable interactions. To apply ANOVA, continuous variables are often broken into categorical variables, and this dichotomization decreases measured relationships between variables (Cohen et al., 2003). Instead, scholars (Covin & Slevin, 1989) choose to use moderated regression analysis, instead, because it is regarded as a conservative method for identifying interaction effects in the sense that interaction terms are tested for significance only after other independent variables are entered into the regression equation.

Prior to the application of a moderated regression technique, data were reviewed to assess whether modeling assumptions are satisfied. Measures of skewness and kurtosis were assessed for each variable in the database. For organization size, natural log was used to account for somewhat skewed distributions within these data.

Model Specification

The form of the moderated regression equation employed in this research was $Y = a + bX + cZ + dXZ$, where Y is the dependent variables (venture philanthropy practices for Study 1 and social and financial performance for Study 2), X is the theoretically defined independent variable (the legal structure, donor/investor demand, affiliation with professional associations, the management team's training), Z is the theoretically defined moderator variable (EO), and XZ is the interaction term (Sharma et al., 1981).

The Transformation of the Variables

The large numbers of interaction terms included in a moderated regression model is likely to cause serious multicollinearity. Thus, to minimize correlations between the independent variables and their interaction terms, I followed recommendations by Aiken

and West (1991) and Cohen et al. (2003) for transforming variables. Independent variables, if continuous¹³, were mean-centered by subtracting the corresponding variable mean from each value. Such rescaling does not affect the substantive interpretation of the coefficients. The mean-centered variables for this regression analysis were EO, donors'/investors' demand, affiliation with professional associations, and the management team's training. With those mean-centered variables, I then computed interactive terms by multiplying the centered variable for EO and another centered variable representing each of the institutional factors, except the variable for the legal structure, which as a categorical variable does not need to be centered, according to Aiken and West (1991). This process produced a total of four terms of interaction for: (1) EO and the legal structure; (2) EO and donor/investor demands; (3) EO and affiliation with professional associations; and (4) EO and the management team's training.

Multicollinearity Diagnostic Test Results

The means, standard deviations, and correlations of the variables are displayed in Table 3.16 for Study 1 and Tables 3.17 and 3.18 for Study 2. Overall, correlations among the independent variables are relatively modest, ranging from -.54 to .47. The correlations among variables do not suggest possible multicollinearity¹⁴. Nonetheless, to minimize a threat of multicollinearity, I applied multicollinearity diagnosis by calculating values for the variance inflation factor (VIF) and tolerance for each of the regression

¹³ According to Aiken and West (1991), the criteria and categorical variables do not need to be centered. Thus, variables for venture philanthropy practices and for the legal structure of SIFs were not mean-centered in this study.

¹⁴ Cohen, Cohen, West, and Aiken (2003) found that the correlations of the X and Z terms with XZ are substantial if variables remained uncentered, whereas the same correlations fell to zero in the centered case. This drop was referred to as an example of essential versus nonessential multicollinearity (Marquardt, 1980).

coefficients. Tolerance figures of variables range from .492 to .93, which is well above critical values of Tolerance (.10 , Cohen et al., 2003). The VIF ranged from a low of 1.057 to a high of 2.034, well below the cutoff of 10 (Cohen et al., 2003; Neter, Wasserman, & Kutner, 1985). These results suggest that multicollinearity is not an issue in my analyses.

Summary

This chapter examines research methods, sampling and data collection methods, and analytical procedures of this dissertation and justifies using them for two empirical studies. The operationalization and the measures of dependent, independent, and control variables are discussed and displayed in Table 3.15. Several multicollinearity diagnostic tests were conducted to assure that multicollinearity is not a major issue in this study. With these results, the next chapter will discuss results of theory testing and analyses on main effects and moderating effects on SIFs' venture philanthropy behaviors and social/financial performance.

Table 3.16. Means, Standard Deviations, and Correlations: Venture Philanthropy Practices, EO, and Institutional Pressures

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Venture philanthropy practices	2.11	.94	1.00														
2. EO	4.84	.84	.14 **	1.00													
3. Nonprofit status	.88	.32	-.54 **	.00	1.00												
4. Donor/investor demand for social outcome	4.34	.92	-.22 **	.06	.47 **	1.00											
5. Donor/investor demand for financial outcome	2.83	1.35	.45 **	.01	-.46 **	-.38 **	1.00										
6. Affiliation with grantmaker professional associations	1.94	1.49	-.25 **	.01	.27 **	.04	-.25 **	1.00									
7. Affiliation with venture capital professional associations	1.00	1.15	.42 **	.19 *	-.40 **	-.23 **	.14 **	.14 **	1.00								
8. Management team's training in nonprofits	7.87	1.75	-.27 **	.16 **	.42 **	.19 **	-.22 **	.28 **	-.27 **	1.00							
9. Management team's training in business	8.35	1.68	.29 **	.10 **	-.20 **	.02	.11 **	-.14 **	.13 **	-.09 **	1.00						
10. Organization age	25.75	23.63	-.15 **	-.05	.20 **	-.06	-.05	.32 **	-.22 **	.29 **	-.10 **	1.00					
11. Organization assets ^a	7.58	1.22	-.12 **	.01	-.06	.01	.01	.10 **	-.03	-.03	.08 *	.33 **	1.00				
12. Nonprofit status of funded social venture	.63	.48	-.38 **	.08 *	.30 **	.01	-.08 *	.27 **	-.19 **	.30 **	-.11 **	.23 **	.24 **	1.00			
13. EO x donor/investor demand for social outcome			.10 **	-.10 **	-.12 **	-.08 *	.08 *	-.03	.07 *	-.14 **	.13 **	-.06	.14 *	-.06	1.00		
14. EO x affiliation with grantmaker professional associations			-.05	.01	-.06	-.04	.07 *	-.07	-.02	-.02	-.02	.05	.01	-.12 **	-.06	1.00	
15. EO x management team's training in nonprofits			.06	-.03	-.13	-.14 **	.11 **	-.02	.07 **	.04	-.04	-.02	-.04	-.13 **	.22 **	.37 **	1.00

n = 146 ^a Log-transformed * *p* < .05 ** *p* < .01 Two-tailed tests.

Table 3.17. Means, Standard Deviations, and Correlations: Social Performance, EO, and Institutional Pressures

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Social Performance	3.68	.68	1.00															
2. EO	4.84	.84	-.01	1.00														
3. Nonprofit status	.88	.32	.08 *	.00	1.00													
4. Donor/investor demand for social outcome	4.34	.92	.14 *	.06	.47 **	1.00												
5. Donor/investor demand for financial outcome	2.83	1.35	-.03	.01	-.46 **	-.38 **	1.00											
6. Affiliation with grantmaker professional associations	1.94	1.49	.08 *	.01	.27 **	.04	-.25 **	1.00										
7. Affiliation with venture capital professional associations	1.00	1.15	.02	.19 **	-.40 **	-.23 **	.14 **	.14 **	1.00									
8. Management team's training in nonprofits	7.87	1.75	.21 **	.16 **	.42 **	.19 **	-.22 **	.28 **	-.27 **	1.00								
9. Management team's training in business	8.35	1.68	-.06	.10 **	-.20 **	.02	.11 **	-.14 **	.13 **	-.09 **	1.00							
10. Organization age	25.75	23.63	.03	-.05	.20 **	-.06	-.05	.32 **	-.22 **	.29 **	-.10 **	1.00						
11. Organization assets ^a	7.58	1.22	-.25 **	.01	-.06	.01	.01	.10 **	-.03	-.03	.08 *	.33 **	1.00					
12. Nonprofit status of funded social venture	.63	.48	-.13 **	.08 *	.30 **	.01	-.08 *	.27 **	-.19 **	.30 **	-.11 **	.23 **	.14 *	1.00				
13. EO x nonprofit status			-.01	-.01	.01	-.11 **	.09 **	-.05	.16 **	-.14 **	.04	.01	.08	-.10	1.00			
14. EO x donor/investor demand for financial outcome			.05	.08 *	.10 **	.08 *	-.03	.07 *	-.03	.11 **	-.01	-.02	- *	.06 **	-.44 *	1.00		
15. EO x affiliations with venture capital associations			-.04	.03	.17 **	.08	-.03	-.01	.09 **	.08 *	-.14 **	.03	-	.17 **	-.40 *	.24	1.00	
16. EO x management training in business			-.01	-.15 **	.04	.12 **	-.01	-.02	-.12 **	-.04	.23 **	.04	.04	-.02	-.19 **	.01	-.01	1.00

n = 146 ^a Log-transformed * *p* < .05 ** *p* < .01 Two-tailed tests.

Table 3.18. Means, Standard Deviations, and Correlations: Financial Performance, EO, and Institutional Pressures

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Financial Performance	2.81	.73	1.00															
2. EO	4.84	.84	.05	1.00														
3. Nonprofit status	.88	.32	.01	.00	1.00													
4. Donor/investor demand for social outcome	4.34	.92	-.06	.06	.47 **	1.00												
5. Donor/investor demand for financial outcome	2.83	1.35	.01	.01	-.46 **	-.38 **	1.00											
6. Affiliation with grantmaker professional associations	1.94	1.49	.07	.01	.27 **	.04	-.25 **	1.00										
7. Affiliation with venture capital professional associations	1.00	1.15	-.05	.19 **	-.40 **	-.23 **	.14 **	.14 **	1.00									
8. Management team's training in nonprofits	7.87	1.75	.03	.16 **	.42 **	.19 **	-.22 **	.28 **	-.27 **	1.00								
9. Management team's training in business	8.35	1.68	.19 **	.10 **	-.20 **	.02	.11 **	-.14 **	.13 **	-.09 **	1.00							
10. Organization age	25.75	23.63	.08 *	-.05	.20 **	-.06	-.05	.32 **	-.22 **	.29 **	-.10 **	1.00						
11. Organization assets ^a	7.58	1.22	-.01	.01	-.06	.01	.01	.10 **	-.03	-.03	.08 *	.33	1.00					
12. Nonprofit status of funded social venture	.63	.48	.01	.08 *	.30 **	.03	-.08 *	.27 **	-.19 **	.30 **	-.11 **	.23	.14 *	1.00				
13. EO x nonprofit status			.03	-.01	.01	-.11 **	.09 **	-.05	.16 **	-.14 **	.04	.01	.08	-.10	1.00			
14. EO x donor demand for social outcome			.03	-.09 **	-.11 **	.08 *	.08 *	-.03	.07 *	-.14 **	.13 **	-.10	.01 **	-.06 **	.38 *	1.00		
15. EO x affiliations with grantmaker professional associations			.01	.01	-.05	-.03	.07 **	-.07	-.02	-.02	-.02	.08	.02	-.12	.26	-.06 *	1.00	
16. EO x management training in nonprofits			-.02	-.03	-.13 **	.14 **	.10 **	-.02	.07 *	.04	-.04	.02	.04	-.13 **	.42 **	.22 **	.37 *	1.00

$n = 146$ ^a Log-transformed * $p < .05$ ** $p < .01$ Two-tailed tests.

CHAPTER 4: ANALYSIS AND RESULTS

The present chapter explains the results of two studies, each of which tests hypotheses on different dependent variables: Study 1 (effects on venture philanthropy practices) and Study 2 (effects on social and financial performance). Each study first introduces the descriptive statistics to organizations in the population of interest. This is followed by the results of the moderated regression analyses, which are accompanied by the figures representing the main effects and the two-way interaction effects. The chapter also assesses the model fit and interprets the findings from statistical analyses.

Study 1: Factors Affecting Venture Philanthropy Practices

This section discusses the results of Study 1, which analyzes effects on venture philanthropy practices by testing hypotheses 1 through 9.

Descriptive Statistics

The means, standard deviations, and correlations of the variables used in the regression analyses are displayed in Table 3.16 of Chapter 3. Among the survey participants, 129 represented nonprofits and 17 represented for-profits. The average SIFs had been in operation for 26 years.

There are several results shown in the correlation matrix (Table 3.16) that warrant further discussion. First and foremost, it is noteworthy that statistically significant correlations exist between venture philanthropy practices and each of the independent variables included in the study. The directions of these results are consistent with

arguments in support of hypotheses posited in Chapter 2. For instance, the positive correlation between venture philanthropy practices and entrepreneurial orientation (EO) ($r = .14, p < .01$) is suggested by hypothesis 1, which postulates that the more entrepreneurial the SIF is, the more likely it is to implement venture philanthropy approaches. As hypotheses 3b, 4b and 5b suggest, venture philanthropy practices are positively and significantly correlated with all venture capital institutional variables, i.e., donors' and investors' demand for financial outcomes ($r = .45, p < .01$), affiliation with venture capital professional associations ($r = .42, p < .01$), and the management team's training in business ($r = .29, p < .01$). The correlations between venture philanthropy practices and all variables representing philanthropic institutional pressures are significant, yet negative. These results are again consistent with the direction posited by hypotheses 2, 3b, 4b and 5b.

The correlation between the nonprofit status and venture philanthropy practices is relatively high ($r = -.54, p < .01$), while a modest correlation exists between venture philanthropy practices and three other philanthropic institution variables, i.e., donors' and investors' demand for social outcomes ($r = -.22, p < .01$), affiliation with grantmaker professional associations ($r = -.25, p < .01$), and the management team's training in nonprofits ($r = -.27, p < .01$). Correlations between venture philanthropy practices and interaction terms associated with regulative institutional pressures, i.e., an interaction between EO and the nonprofit status ($r = .12, p < .01$) and an interaction between EO and donors'/investors' demand for social outcomes ($r = .10, p < .01$), are also found to be consistent with the hypotheses. In summary, the correlation results overall are consistent

with the implications of hypotheses at both the main effect and the interaction levels.

Each of these correlation analysis findings is theoretically defensible in Study 1.

Other noteworthy results include the negative correlations with organization age ($r = -.14, p < .01$) and organization size measured by assets ($r = -.19, p < .01$). The results assure implications of the prior studies depicting SIFs as relatively young and small organizations (Community Wealth Ventures, Inc., 2002). The nonprofit status of funded social ventures also has a negative and significant correlation with venture philanthropy practices ($r = -.38, p < .01$). This was expected, given that the use of equity investment is an instrument available only to fund for-profit ventures. The correlation between EO and the nonprofit status is close to zero albeit insignificant ($r = .01, p > .05$). What is particularly noteworthy here is the implication that the nonprofit status is not inherently antithetical to EO. This result is consistent with prior empirical research on EO (Davis, Marino, Aaron, & Tolbert, 2011), which suggests that there is no significant difference in EO between nonprofits and for-profits. Furthermore, the philanthropic institution variables and the venture capital institution variables show the negative correlations with one another. That is, the correlation between donors' and investors' demand for social outcomes versus that for financial outcomes is $-.38 (p < .01)$. The management team's training in nonprofits is very modestly, yet also negatively, correlated with the management team's training in business ($r = -.09, p < .01$). These correlations show the antithetical nature of pressures from two different institutional fields.

Results of Hypotheses Test

Model Assessment

As discussed in Chapter 3, I used moderated multiple regression analysis to test my hypotheses (Cohen et al., 2003), with a mean-centering procedure for the independent and moderating variables to minimize multicollinearity (Aiken & West, 1991). Table 4.1 presents the results for three models, testing direct and moderating effects of EO and institutional pressures on SIFs' venture philanthropy practices (hypotheses 1 to 9). In order to compare the obtained estimated coefficients, the coefficients reported in Table 4.1 are standardized¹⁵.

To test the hypotheses, Model 1 (the base model) enters all control variables first in regression equations to control for the potentially confounding effects of these variables. This step permits a more accurate assessment of the predictive power of the independent variables (Covin et al., 1997). Next, Model 2 includes the control variables and then introduces the eight main effects for venture philanthropy practices, offering an evaluation of hypotheses 1 to 5. Finally, the four two-way interaction terms were added to the equation in Model 3 to test hypotheses 6 to 9. This model represents the most conservative estimate of hypothesized effects, as it included all the control variables, main effects and interactions (Barrick & Mount, 1993). Table 4.2 reports results from

¹⁵ The (partial) regression coefficient B is often viewed as the premier causal indicator because it informs us about the estimated effect on the dependent variable of a change in the value of a putative cause. Nevertheless, B coefficient, as frequently presented, has limitations, especially those associated with measurement units that are unfamiliar or that lack intrinsic meaning. As a consequence of a lack of consensus on measures, it is often easier to interpret β than B . β essentially rescales effects in terms of the standard deviations of the sample at hand. This is particularly useful when our research question has to do with comparing different variables for their (partial) effects on Y in a given population represented by this sample. It is also often a necessary convenience when comparing effects of a given (conceptual) X_i on Y across studies, which may differ on be different depending on the chosen measures of X_i and Y , and may even differ with regard to the population from which the sample was drawn. Consequently, it is generally recommended that β be reported, along with its SE in any research reports (Cohen et al., 2003, p. 154).

Model 3, providing further details of regression results, including both unstandardized and standardized coefficients, standard errors, p -values, and t -statistics.

Before interpreting the results, it is important to evaluate the changes in R^2 and adjusted R^2 in the models. The critical test in moderated regression analysis is the increment in R^2 when an interaction term is added to a regression equation already containing main effects (Cohen & Cohen, 1983). Both R^2 and adjusted R^2 of the base model are .19 ($p < .001$), indicating that the control variables of organization age, organization size, and the nonprofit status of funded social ventures account for 19 percent of the variance in venture philanthropy practices. The main effects model, which includes control variables and all independent variables, makes a contribution over and above the base model with a considerable increment ($\Delta R^2 = .32, p < .001$) of R^2 and adjusted R^2 ($R^2 = .51$, adjusted $R^2 = .50$). Finally, both R^2 and adjusted R^2 increase from the main effect model to the two-way interaction model ($R^2 = .53$, adjusted $R^2 = .52$), although these increases are very modest ($\Delta R^2 = .02, p < .001$). In sum, the increment in R^2 and adjusted R^2 is present throughout analysis. The increments in R^2 and adjusted R^2 are also statistically significant for each term added, suggesting that the interaction terms also added unique variance. As this increment in R^2 is statistically significant¹⁶, barring a

¹⁶ It should also be noted that R^2 is critical from the standpoint of statistical power. The power of a statistical test (the probability of detecting an effect when that effect should in fact be detected) is a function of the alpha level set to test hypotheses (the statistical level at which null hypotheses will be rejected), the strength of the association between variables (the adjusted R^2), the number of independent variables, and the size of the sample (Agle, Mitchell, & Sonnenfeld, 1999; Hair, Anderson, Tatham, & Black, 1998).

Table 4.1. Results of Moderated Regression Analysis: Effects on Venture Philanthropy Practices

Variables		Model 1 (Base Model)	Model 2 (Main Effects Model)	Model 3 (Two-way Interaction Model)
Control				
	Organization age	-.14 ***	-.01	.01
	Organization size ^a	.23 ***	.16 ***	.16 ***
	The nonprofit status of funded social ventures	-.37 ***	-.25 ***	-.26 ***
Main effects				
	EO		.09 **	.09 **
	The nonprofit status		-.19 ***	-.21 ***
	Donor/investor demand for social outcomes		.04	.05
	Donor/investor demand for financial outcomes		.30 ***	.30 ***
	Affiliation with grantmaker professional associations		-.10 **	-.11 ***
	Affiliation with venture capital professional associations		.27 ***	.26 ***
	Management team's training in nonprofits		.05	.06 †
	Management team's training in business		.114 ***	.11 ***
Two-way interaction				
	EO x the nonprofit status			.06 †
	EO x donor/investor demand social outcomes			-.01
	EO x affiliation with grantmaker professional associations			-.11 ***
	EO x management team's training in nonprofits			-.04
	R^2	.19 ***	.51 ***	.53 ***
	Adjusted R^2	.19 ***	.50 ***	.52 ***
	ΔR^2		.32 ***	.02 ***
	F-statistics	63.752 ***	74.020 ***	57.052 ***

n = 146
 † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
 Dependent variable is venture philanthropy practices.

^a Log-transformed
 Standardized coefficients are reported

Table 4.2. Results of Moderated Regression Analysis from Model 3: Effects on Venture Philanthropy Practices

Variables		Unstandardized Coefficients		Standardized Coefficients	<i>t</i> -statistics	Sig.	<i>R</i> ²	Adjusted <i>R</i> ²	ΔR^2	<i>F</i> -statistics
		B	S.E.	Beta						
Base Model	(Constant)	1.51	.15		***	9.925	.000			
	Organization age	.00	.00	.01		.114	.909	.19	.19	63.752***
	Organization size ^a	.12	.02	.16	***	5.736	.000			
	The nonprofit status of funded social ventures	-.51	.06	-.26	***	-9.351	.000			
Main Effects Model	EO	.10	.03	.09	**	3.281	.001	.51	.50	.32 74.020***
	The nonprofit status	-.61	.11	-.21	***	-5.700	.000			
	Donor/investor demand for social outcomes	.05	.03	.05		1.583	.114			
	Donor/investor demand for financial outcomes	.21	.02	.30	***	10.334	.000			
	Affiliation with grantmaker professional associations	-.07	.02	-.11	***	-3.533	.000			
	Affiliation with venture capital professional associations	.21	.03	.26	***	8.390	.000			
	Management team's training in nonprofits	.03	.02	.06	†	1.854	.064			
	Management team's training in business	.06	.02	.11	***	4.091	.000			
Two-way Interaction Model	EO x the nonprofit status	.20	.11	.06	†	1.833	.067	.53	.52	.02 57.052***
	EO x donor/investor demand for social outcomes	-.01	.04	-.01		-.134	.894			
	EO x affiliation with grantmaker professional associations	-.08	.02	-.11	***	-3.956	.000			
	EO x management team's training in nonprofits	-.02	.02	-.04		-1.197	.232			

n = 146

† $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Dependent variable is venture philanthropy practices.^a Log-transformed

Regression weights shown are coefficients obtained at the full model (Model 3)

Type I error, this is evidence that an interaction effect is present in Study 1 (Jaccard & Turrisi, 2003).

In addition, to examine the regression errors, the model's standardized residuals were plotted against the predicted values. The plot reveals no extreme outliers. All of the standardized residuals are within three standard deviations of zero.

***Results of the Main Effects Model: Effects on Venture Philanthropy Practices
(Hypotheses 1–5)***

Table 4.1 displays the results of moderate regression for three models. Model 1 presents the results for the control variables when regressed on venture philanthropy practices. In this base model, all control variables are statistically significant. More specifically, the organization age ($\beta = -.14, p < 0.001$) and the nonprofit status of funded social ventures ($\beta = -.37, p < 0.001$) have negative effects on venture philanthropy practices. As discussed in the section about correlations, these results are expected given that the literature repeatedly points out the majority of SIFs were created in the last two decades (Community Wealth Ventures, 2000, 2002), and as discussed in the section about the results in the correlation matrix, the equity investment approach is not possible if social ventures are nonprofit. The prior literature (Letts et al., 1997) also stresses that SIFs often provide a larger amount of funding than do traditional foundations. This implication from the literature matches the positive relationship between the organization size and venture philanthropy practices ($\beta = .23, p < 0.001$). Moreover, as per the control variables of the organization size and the nonprofit status of funded social ventures, the coefficient estimates remain significant in the same direction throughout analysis,

although the coefficient of the organization size is no longer significant in Models 2 and 3.

Model 2 in Table 4.1 tests the main effects by hypotheses 1 to 5 that relate SIFs' EO and external institutional pressures with venture philanthropy practices. As noted in the previous chapter, entrepreneurial posture is among the most frequently cited determinants that distinguish SIFs from their traditional counterparts (Fleishman, 2009; Prewitt, 2006b). The prior literature of EO also relates strategic practices with organizations' entrepreneurial posture (Covin & Slevin, 1991). I expect, therefore, for the level of SIFs' EO to be positively related to their venture philanthropy practices (hypothesis 1). Accordingly, Model 2 within Table 4.1 presents a positive and significant relationship between EO and venture philanthropy practices ($\beta = .09, p < 0.01$), providing support for hypothesis 1. The variable remains significant and positive in the full model (Model 3), as well.

Hypothesis 2 investigates an impact of SIFs' legal structure on venture philanthropy practices, postulating a negative relationship between the nonprofit status and venture philanthropy practices. Model 2 shows that the estimated coefficient is negative and statistically significant ($\beta = -.19, p < 0.001$), which supports hypothesis 2. As shown in Model 3, this relationship likewise remains significant in the hypothesized direction throughout analysis and the negative effect becomes even stronger in the full model ($\beta = -.21, p < 0.001$). This confirms that the hypothesized effect is present.

According to hypothesis 3, donors' and investors' demand for funding outcomes is likely to shape SIFs' venture philanthropy practices, yet in a varying effect. Donors' and investors' demand for social outcomes is likely to have a negative effect on venture

philanthropy practices (hypothesis 3a), whereas their demand for financial outcomes is positively related to venture philanthropy practices (hypothesis 3b). The results in Table 4.1 provide partial support for hypothesis 3. The coefficient for donors' and investors' demand for financial outcomes (hypothesis 3b) is positive and statistically significant at the 0.001 level ($\beta = .30, p < 0.001$), which supports hypothesis 3b. The relationship remains positive and significant in the full model, also. The coefficient for donors' and investors' demand for social outcomes, on the other hand, is positive ($\beta = .04$), which is opposite of the direction posited by hypothesis 3a. The coefficient also fails to achieve statistical significance. The full model does not see the significant and negative coefficient estimates, either, and thus hypothesis 3a is not supported.

Hypothesis 4 states that affiliation with grantmaker professional associations will negatively affect venture philanthropy practices (hypothesis 4a), whereas affiliation with venture capital professional associations will have a positive effect (hypothesis 4b). Results in Table 4.1 offer strong support for this hypothesis. In Model 2, the coefficient for affiliation with grantmaker professional associations is $-.10$ and is statistically significant at the 0.01 level, and the coefficient for affiliation with venture capital professional associations is $.27$ and is statistically significant at the 0.001 level. Results in Model 3, which are deemed more conservative (Cohen et al., 2003), maintain the hypothesized relationships for affiliation with grantmaker professional associations ($\beta = -.11, p < 0.001$) and for affiliation with venture capital professional associations ($\beta = .26, p < 0.001$), as well.

Finally, hypothesis 5 expects a negative effect of the management team's training in nonprofits (Hypothesis 5a) and a positive effect of the management team's training in

business (Hypothesis 5b). This hypothesis is partially supported. Model 2 shows that the coefficient for the management team's training in business is positive and statistically significant ($\beta = .11, p < 0.001$), suggesting that hypothesis 5b is supported. As shown in Model 3, this relationship remains the same throughout analysis ($\beta = .11, p < 0.001$). However, Model 2 finds a positive relationship between the management team's training in nonprofits and venture philanthropy practices ($\beta = .05$), which is opposite to the hypothesized direction. The result is not statistically significant, either. In Model 3, the coefficient for the management team's training in nonprofits attains marginal significance ($p < 0.1$), yet it is still positive. As such, hypothesis 5a is not supported.

To summarize, the main effects model shows a strong support for the hypotheses, with the results offering strong or partial support of all hypotheses (hypotheses 1 to 5). It is particularly noteworthy that all hypotheses associated with venture capital institutional effects achieve strong support at the 0.001 level throughout analysis. On the other hand, mixed results exist for the hypotheses testing the relationship between venture philanthropy practices and philanthropic institutional pressures. These results will be discussed further in the subsequent chapter.

Results of the Two-way Interaction Model: EO Moderating Effects on the Philanthropic Institutions-Venture Philanthropy Practices (Hypotheses 6–9)

As aforementioned, moderated regression analysis should see the increment in R^2 by adding interaction terms to a regression equation containing main effects (Cohen & Cohen, 1983). As seen in Model 3 within Table 4.1, the addition of the two-way

interaction terms to the equation increases the explained variance in venture philanthropy practices ($\Delta R^2 = .02, p < 0.001$).

The two-way interaction effects were examined by testing hypotheses 6, 7, 8, and 9. These hypotheses postulate that SIFs' EO moderates a negative effect of institutional pressures from the traditional philanthropic field on venture philanthropy practices. Tables 4.1 and 4.2 report results of the interaction effects. First, hypothesis 6 implies that if a higher level of EO exists, the relationship between venture philanthropy practices and the nonprofit status changes from negative to positive. As shown in Model 2 within Table 4.1, the coefficient for the nonprofit status is negative and statistically significant. Now, the full model shows that the interactive effect of SIFs' EO and nonprofit status has a positive and marginally significant coefficient ($\beta = .06, p = .067$). This suggests that venture philanthropy practices is jointly determined by the interaction of entrepreneurial style and the organization's legal structure. Thus, hypothesis 6 receives support.

However, hypotheses 7, 8, and 9 are not supported. More specifically, the coefficient for the interaction between EO and affiliation with grantmaker professional associations is statistically significant, but the direction is opposite to what hypothesis 8 postulates ($\beta = -.11, p = .000$). The coefficients of interaction terms are negative and insignificant for two other philanthropic institution variables, i.e., donors' and investors' demand for social outcomes ($\beta = -.01, p = .894$), and the management team's training in nonprofits ($\beta = -.04, p = .232$). Again, these directions are opposite to the hypothesized directions, and as such, the results do not support hypotheses 7 and 9.

A very small increment of R^2 and adjusted R^2 ($\Delta R^2 = .02$) from the main effects model to the interaction model does not negate a possibility of an interaction effect

postulated by hypothesis 6. According to Cohen et al. (2003), interactions typically account for only a few percentage points of variances over and above first-order effects in social science research. By his Monte Carlo study, Evans (1985) also observes that an interaction term explaining 1 percent of the variance is likely to be significant. In other words, when a genuine interaction exists, even under the most extreme conditions, the interaction effect usually explains at least 1 percent of the variance. However, the interaction effect is likely to be insignificant if the main effects only absorb 10 percent of the dependent variable. In my study, independent and control variables in the main effects model account for over 50 percent of the variance in the dependent variable. Thus, it is plausible to consider that the interaction effect is present in the relationship between SIFs' EO and the nonprofit status.

Nonetheless, to further investigate interaction effects on venture philanthropy practices, I performed several probing analyses: (1) the moderated multiple regression based on three sub-dimensions of EO (i.e., innovativeness, proactiveness, and risk taking) and (2) subgroup analysis (Sharma et al., 1981)¹⁷.

¹⁷ Advocated by Aiken and West (1991), a simple slope analysis by plotting the interaction has been actively explored by the prior research on interaction effects (e.g., De Clercq et al., 2010; Miller & Wesley, 2010; Richard, Barnett, Dwyer, & Chadwick, 2004; Stam & Elfring, 2008; Wiklund & Shepherd, 2003). Put simply, we plot the interaction by defining the low level as one standard deviation from the mean and the high level as plus one standard deviation from the mean (Cohen et al., 2003). I plotted the interaction, but did not include the result in this dissertation. This is because of this artificial dichotomy, the use of this method was found to be highly debatable after I consulted with a member of my dissertation committee and a faculty member of the Department of Statistics at UNC at Greensboro.

Post Hoc Analyses on Interactions

Analysis by EO Sub-dimension Measures

As discussed in Chapter 2, EO is generally conceived as a unidimensional construct composed of three sub-dimensions—innovativeness, risk taking, and proactiveness—that must positively covary in order for EO to be manifested (Miller, 1983). As such, a most commonly employed EO measure is the Miller/Covin and Slevin (1989) scale developed on this conceptualization (Rauch et al., 2009). My study also utilizes this Miller/Covin and Slevin scale to measure EO.

Many studies applying EO to the nonprofit context (Cools & Vermeulen, 2008; Guo, Shockley, & Tang, 2009; Morris, Coombes, Schindehutte, & Allen, 2007; Pearce, Fritz, & Davis, 2010) stress a distinct manner in which EO manifests within nonprofit organizations. For instance, Pearce et al. (2010) find that a positive relationship with performance exists in the dimensions of innovativeness and autonomy dimensions, but not in proactiveness, competitive aggressiveness, or risk seeking. Qualitative research by Guo et al. (2009) underscores that the individual dimensions of EO have different antecedents and consequences, depending on the environmental context. Findings of these prior studies collectively suggest it is plausible to examine effects on venture philanthropy practices in the different sub-dimensions constituting EO. Given these, the effects on venture philanthropy practices were analyzed in and compared across four measures of EO, i.e., the aggregated EO, innovativeness, proactiveness, and risk taking.

Table 4.3 presents the means, standard deviations, and correlations of the variables used for three different measures of EO. The correlations here are generally modest. The VIF ranged from 1.057 to 2.136 in the innovativeness measure, from 1.057

to 2.049 in the proactiveness measure, and from 1.057 to 2.080 in the risk taking measure, demonstrating that all VIF values in three measures are well below the cutoff of 10 recommended by Neter, Wasserman, and Kutner (1985). Tolerance figures of variables range from .486 to .946 in the innovativeness measure, from .427 to .946 in the proactiveness measure, and from .491 to .946 in the risk taking measure. All tolerance values are well above critical values, too. Thus, multicollinearity should not be an issue in the sub-dimension measures.

Table 4.4 highlights a comparison of the results from moderated regression analyses in four different measures. The more detailed results of the innovativeness, the proactiveness, and the risk taking models are found in Appendixes 1, 2 and 3, respectively. The comparison in Table 4.4 demonstrates an overall similarity of coefficients R^2 and adjusted R^2 , in four measures. This was expected, given that many prior studies find the salient dimensions of EO are highly intercorrelated with each other (Rauch et al., 2009). Most importantly for my investigation about hypothesis 6, interaction terms in most sub-dimension measures have a significant and positive coefficient, which is consistent with hypothesis 6. More specifically, the coefficient for the nonprofit status and innovativeness is .11 ($p < 0.01$) and that for the nonprofit status and proactiveness is .06 ($p < 0.1$). However, the risk taking measure finds different results: The interaction effect for risk taking and the nonprofit status is not consistent with the hypothesis, but that of risk taking and donors' demand for social outcomes is significant in the hypothesized direction ($\beta = .06, p < 0.01$). This result, then, directed me to the subgroup analysis.

Table 4.3. Means, Standard Deviations, and Correlations in the Different Measures: Innovativeness, Proactiveness, and Risk Taking Dimensions

	Innovativeness	Proactiveness	Risk taking
Mean	4.56	5.10	4.87
S.D.	.95	.97	1.13
1. Venture philanthropy practices	.12 **	.20 **	.013
2. Innovativeness/Proactiveness/Risk taking			
3. The nonprofit status	.11 **	-.10 **	-.03
4. Donor/investor demand for social outcomes	.12 **	-.01	.01
5. Donor/investor demand for financial outcomes	-.02 **	.03	.01
6. Affiliation with grantmaker professional associations	-.02	-.01	.03
7. Affiliation with venture capital professional associations	.07 *	.19 **	.18 **
8. Management team's training in nonprofits	.12 **	.21 **	.03
9. Management team's training in business	.16 **	.13 **	-.06 *
10. Organization age	-.05	.01	-.08 *
11. Organization assets ^a	.03	.06 *	-.07 *
12. Nonprofit status of funded social venture	.08 *	.01	.07 *
13. EO x nonprofit status	-.14 **	.08 *	.04
14. EO x donor/investor demand for social outcomes	-.21 **	.23 **	-.06 *
15. EO x affiliation with grantmaker professional associations	-.01	.01	-.05
16. EO x management team's training in nonprofits	-.17 **	-.10 **	.02

n = 146 * *p* < .05 ** *p* < .01 ^a Log-transformed

Two-tailed tests. The mean and standard deviation are based on the original variables, which are not mean-centered.

Table 4.4. Comparison of Results: Effects on Venture Philanthropy Practices by 4 Measures

		Aggregated EO	Innovativeness	Proactiveness	Risk taking
Base Model	Organization age	.01	.01	-.01	-.01
	Organization size ^a	.16 ***	.13 ***	.16 ***	.17 ***
	The nonprofit status of funded social ventures	-.26 ***	-.25 ***	-.25 ***	-.25 ***
	<i>R</i> ²	.19	.19	.19	.19
	<i>Adjusted R</i> ²	.19	.19	.19	.19
Main Effects Model	EO/each sub-dimension	.09 **	.13 ***	.09 **	-.01
	The nonprofit status	-.21 ***	-.23 ***	-.20 ***	-.18 ***
	Donor/investor demand for social outcomes	.05	.05 †	.06 †	.06 †
	Donor/investor demand for financial outcomes	.30 ***	.29 ***	.30 ***	.30 ***
	Affiliation with grantmaker professional associations	-.11 ***	-.09 **	-.10 **	-.12 ***
	Affiliation with venture capital professional associations	.26 ***	.25 ***	.26 ***	.31 ***
	Management team's training in nonprofits	.06 †	.05 †	.05	.07 **
	Management team's training in business	.11 ***	.08 **	.11 ***	.11 ***
	<i>R</i> ²	.51	.51	.51	.50
	<i>Adjusted R</i> ²	.50	.51	.50	.50
	ΔR^2	.32	.32	.32	.31
Two-way Interaction Model	EO/sub-dimension x the nonprofit status	.06 †	.11 **	.06 †	-.06 †
	EO/sub-dimension x donor/investor demand for social outcomes	-.01	-.02	-.03	.06 *
	EO/sub-dimension x affiliation with grantmaker professional associations	-.11 ***	-.14 ***	-.08 **	-.01
	EO/sub-dimension x management training in nonprofits	-.04	-.03	-.04	-.01
	<i>R</i> ²	.53	.54	.52	.51
	<i>Adjusted R</i> ²	.52	.53	.51	.50
	ΔR^2	.02	.03	.01	.01

n = 146 † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
 Dependent variable is venture philanthropy practices.

^a Log-transformed
 Regression weights shown are coefficients obtained at the full model (Model 3).

The Subgroup Analysis

Sharma, Durand and Gur-Arie (1981) advocate that one should use both moderated regression and subgroup analysis in tandem to identify the presence of moderator variables. The issue of subgroup analysis, however, was pointed out, because artificial dichotomization of a quantitative predictor leads to substantial power loss in tests of moderators (Aguinis & Gottfredson, 2010; Cohen et al., 2003). Newsom, Prigerson, Schulz, and Reynolds (2003) also argue that the subgroup analysis does not properly represent how the focal predictor variable's effect varies as a function of the moderator. Nonetheless, the prior literature on EO has used the subgroup analysis as part of the post-hoc tests combined with the moderated regression (Covin et al., 1997; De Clercq, Dimov, & Thongpapanl, 2010). Following these studies, my study also used the subgroup analysis as a post-hoc analytical method to confirm the presence of the interaction effect in the present study.

To conduct the subgroup analysis, I first split the sample at the median value of EO (4.8). Then, correlations were computed between venture philanthropy practices and the nonprofit status. In the group with a lower level of EO, the correlation between these variables is $r = -.63$ ($p < .01$, two-tailed test). In the group with a higher level of EO, this correlation is $r = -.34$ ($p < .01$, two-tailed test). Using a Fisher z-transformation test (Arnold, 1982), z was computed, suggesting that these two correlation coefficients differ significantly ($p < .01$, two-tailed test). The result of a Fisher z-transformation test implies that when the level of EO is higher, the negative impact of the nonprofit status on venture philanthropy is less severe. This finding offers support for hypothesis 6, which advocates a presence of the interaction effect between EO and the nonprofit status on venture

philanthropy practices. To underscore the results of my other hypotheses about interactions for Study 1, I conducted a Fisher z-transformation test to compare correlations between venture philanthropy practices and three other philanthropic institution variables (i.e., donors' demand for social outcomes, affiliation with grantmaker professional associations, and the management team's training in nonprofits). The results of a two-tailed test for these correlations fail to achieve the significant level. To summarize, the subgroup analysis provides the implications consistent with the results of the two-way interaction model of my hypothesis test.

Study 2: Factors Affecting Social And Financial Performance

This section discusses the results of Study 2, which analyzes main and moderating effects on two dependent variables—social performance and financial performance. I employed moderated regression to estimate a separate set of three models (Model 1/the base model; Model 2/the main effects model; and Model 3/the full model) for each dependent variable.

Descriptive Statistics

Study 2 began to obtain the descriptive statistics. The means, standard deviations, and correlations of the variables used for analysis on social performance are displayed in Table 3.17 and for analysis on financial performance in Table 3.18 in Chapter 3. Recall that the correlations between a dependent variable (venture philanthropy practices) and all independent variables were consistent with arguments in support of hypotheses and were statistically significant in Study 1. On the other hand, the correlations between

dependent variables (social versus financial performance) and independent variables do not offer a strong consistency with the implications of hypotheses in Study 2. These correlations are very modest, ranging from $r = -.25$ to $r = .14$ in social performance analysis and from $r = .06$ to $r = .19$ in financial performance analysis.

Table 3.17 illustrates that social performance is correlated with most independent variables in the hypothesized direction, but significant correlations exist only with the philanthropic institution variables. These variables are the nonprofit status ($r = .08, p < .05$), donors' and investors' demand for social outcomes ($r = .14, p < .05$), affiliation with grantmaker professional associations ($r = .08, p < .05$), and the management team's training in nonprofits ($r = .21, p < .01$). Social performance is negatively correlated with two out of three venture capital institution variables, i.e., donors' and investors' demand for financial outcomes ($r = -.03$) and the management team's training in business ($r = -.06$). Although these correlations are in the hypothesized direction, they are not statistically significant.

The results in the correlation matrix for financial performance are less favorable. Table 3.18 shows that financial performance is correlated in the hypothesized direction with four independent variables, that is, the EO ($r = .05$), donors' and investors' demand for social outcomes ($r = -.06$), donors' and investors' demand for financial outcomes ($r = .01$), and the management team's training in business ($r = .19$), among which only the management team's training is significant ($p < .01$). Three interaction terms (EO x the nonprofit status, EO x donors' and investors' demand for social outcomes, EO x affiliation with grantmaker professional associations) have modest correlations with

financial performance in the hypothesized direction, but none of these is statistically significant.

Results of Hypotheses Test

Model Assessment

I employed the same analytical technique as that in Study 1, i.e., moderated multiple regression analysis. Three regression models (Models 1 to 3) were estimated for both social performance analysis and financial performance analysis to investigate the unique contribution that each subset of predictors made toward both the explanation of the dependent variable and individual parameter estimates. The independent and moderating variables were again mean-centered to limit a threat of multicollinearity. Table 4.5 and Table 4.7 present standardized coefficients in Models 1 to 3, testing effects on social performance (hypotheses 10, 12, 14, 16, 18, 20, 21 and 22) and those on financial performance (hypotheses 11, 13, 15, 17, 19, 23, 25 and 26), respectively. In addition, Table 4.6 and Table 4.8 are included here to report further details of the test results.

I examined a change in R^2 and adjusted R^2 in three models. The results of social performance analysis (Table 4.5) and financial performance (Table 4.7) both present the increment in R^2 when an interaction term is added to a regression equation of main effects, following suggestions by Cohen and Cohen (1983). However, compared to the increments in Study 1, the values and the increments of R^2 are considerably small in Study 2. In social performance analysis, both R^2 and adjusted R^2 of the base model are .09 ($p < .001$), indicating that the control variables account for only 9 percent of the

variance in social performance, which is 10 percent lower than the variance explained in venture philanthropy practices in Study 1. R^2 and adjusted R^2 of the base model for a financial performance study are even smaller ($R^2 = .01$, adjusted $R^2 = .01$). The increments of R^2 in Model 2 are only $\Delta R^2 = .08$ for a social performance study ($p < .001$) and $\Delta R^2 = .06$ for a financial performance study ($p < .001$), as opposed to a large increment in Study 1 ($\Delta R^2 = .32$, $p < .001$). Model 3 in Table 4.5 (for social performance) and Table 4.7 (for financial performance) shows an increment of $\Delta R^2 = .01$ ($p < .001$) for social performance and of $\Delta R^2 = .01$ ($p < .001$) for financial performance. Although an interaction term explaining 1 percent of the variance can be significant, it is only so if the preceding main effects use about 80 percent of the variance in the dependent variable (Evans, 1985). As seen in Table 4.7, the main effects of social performance and financial performance research absorb less than 6 percent of the dependent variables. As such, the increment of R^2 indicates that interaction terms are likely to be insignificant in the regression analysis on financial performance. With this prediction, let us now turn to the results of hypothesis tests in Study 2. I will first review the results of social performance and then discuss the results of financial performance analysis.

Table 4.5. Results of Moderated Regression Analysis: Effects on Social Performance

Variables		Model 1 (Base Model)	Model 2 (Main Effects Model)	Model 3 (Two-way Interaction Model)
Control				
	Organization age	.16 ***	.11 **	.12 **
	Organization size ^a	-.28 ***	-.25 ***	-.26 ***
	The nonprofit status of funded social ventures	-.13 ***	-.17 ***	-.16 ***
Main effects				
	EO		-.04	-.04
	The nonprofit status		-.03	-.02
	Donor/investor demand for social outcomes		.17 ***	.17 ***
	Donor/investor demand for financial outcomes		.07 †	.07 †
	Affiliation with grantmaker professional associations		.06	.04
	Affiliation with venture capital professional associations		.09 *	.12 **
	Management team's training in nonprofits		.23 ***	.23 ***
	Management team's training in business		-.04	-.06 †
Two-way interaction				
	EO x donor/investor demand for financial outcomes			.03
	EO x affiliation with venture capital professional associations			-.06 *
	EO x management training in business			.05
	R^2	.09 ***	.17 ***	.18 ***
	Adjusted R^2	.09 ***	.15 ***	.16 ***
	ΔR^2		.08 ***	.01 ***
	F-statistics	25.433 ***	13.564 ***	11.133 ***

n = 146

† $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ^a Log-transformed

Dependent variable is social performance.

Standardized coefficients are reported.

Table 4.6. Results of Moderated Regression Analysis: Social Performance, EO, and Venture Capital Institution Pressures

		Unstandardized Coefficients		Standardized Coefficients Beta	t-statistics	Sig.	R ²	Adjusted R ²	ΔR ²	F-statistics
Variables		B	S.E.							
Controls	(Constant)	4.86	.15		***	32.377	.000			
	Organization age	.00	.00	.12	**	2.909	.004	.09	.09	25,433***
	Organization size ^a	-.15	.02	-.26	***	-7.088	.000			
	The nonprofit status of funded social ventures	-.23	.05	-.16	***	-4.205	.000			
Main Effects	EO	-.03	.03	-.04		-1.175	.240	.17	.15	.08 13,564***
	The nonprofit status	-.04	.10	-.02		-.381	.703			
	Donor/investor demand for social results	.13	.03	.17	***	4.255	.000			
	Donor/investor demand for financial results	.04	.02	.07	†	1.777	.076			
	Affiliation with grantmaker professional associations	.02	.02	.04		.927	.354			
	Affiliation with venture capital professional associations	.07	.03	.12	**	2.857	.004			
	Management team's training in nonprofits	.09	.02	.23	***	5.779	.000			
	Management team's training in business	-.03	.02	-.06	†	-1.680	.093			
	EO x donor/investor demand for financial outcomes	.02	.02	.03		.907	.365	.18	.16	.01 11,133
	EO x affiliation with venture capital professional associations	-.06	.03	-.06	*	-2.070	.039			
	EO x management training in business	.02	.02	.05		1.334	.183			

n = 146

† $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ^a Log-transformed

Dependent variable is social performance.

Regression weights shown are coefficients obtained at the full model (Model 3).

Table 4.7. Results of Moderated Regression Analysis: Effects on Financial Performance

Variables		Model 1 (Base Model)	Model 2 (Main Effects Model)	Model 3 (Two-way Interaction Model)
Control				
	Organization age	.09 *	.07	.07
	Organization size ^a	-.04	-.07 †	-.07 †
	The nonprofit status of funded social ventures	-.01	-.02	-.02
Main effects				
	EO		.06 †	.06
	The nonprofit status		.02	.01
	Donor/investor demand for social outcomes		-.10 *	-.10 *
	Donor/investor demand for financial outcomes		-.001	-.01
	Affiliation with grantmaker professional associations		.12 **	.12 **
	Affiliation with venture capital professional associations		-.12 **	-.12 **
	Management team's training in nonprofits		-.03	-.02
	Management team's training in business		.23 ***	.22 ***
Two-way interaction				
	EO x the nonprofit status			.03
	EO x donor/investor demand for social outcomes			.01
	EO x affiliation with grantmaker professional associations			.01
	EO x management training in nonprofits			-.04
	R^2	.01	.07 ***	.08 ***
	Adjusted R^2	.01	.06 ***	.05 ***
	ΔR^2		.06 ***	.01
	F -statistics	1,913	4,970 ***	3,713 ***

n = 146 † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ^a Log-transformed
 Dependent variable is financial performance. Standardized coefficients are reported.

Table 4.8. Results of Moderated Regression Analysis: Financial Performance, EO, and Philanthropic Institution Pressures

		Unstandardized Coefficients		Standardized Coefficients	t-statistics	Sig.	R ²	Adjusted R ²	ΔR ²	F-statistics
Variables		B	S.E.	Beta						
Controls	(Constant)	3.08	.17		***	17.965	.000			
	Organization age	.00	.00	.07		1.521	.129	.01	.01	1,913
	Organization size ^a	-.04	.02	-.07	†	-1.682	.093			
	The nonprofit status of funded social ventures	-.03	.06	-.02		-.528	.598			
Main Effects	EO	.05	.03	.06		1.629	.104	.07	.06	.06 4,970***
	The nonprofit status	.02	.12	.01		.188	.851			
	Donor/investor demand for social outcomes	-.08	.04	-.10	*	-2.182	.029			
	Donor/investor demand for financial outcomes	-.01	.02	-.01		-.065	.948			
	Affiliation with grantmaker professional associations	.06	.02	.12	**	2.730	.006			
	Affiliation with venture capital professional associations	-.08	.03	-.12	**	-2.773	.006			
	Management team's training in nonprofits	-.01	.02	-.02		-.519	.604			
	Management team's training in business	.10	.02	.22	***	5.836	.000			
Two-way Interaction	EO x the nonprofits status	.09	.12	.03		.772	.441	.08	.05	.01 3,713***
	EO x donor/investor demand for social outcomes	.01	.04	.01		.259	.796			
	EO x affiliation with grantmaker professional associations	.01	.02	.01		.251	.802			
	EO x management training in nonprofits	-.02	.02	-.04		-.876	.381			

n = 146 † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ^a Log-transformed
 Dependent variable is financial performance.
 Regression weights shown are coefficients obtained at the full model (Model 3).

Results of the Main Effects Model: Effects on Social Performance (Hypotheses 10, 12, 14, 16 and 18)

Table 4.5 displays the results of three models testing hypotheses for social performance research. All three control variables in the base model have statistically significant coefficients. More specifically, the coefficients for the organization size ($\beta = -.28, p < 0.001$) and the nonprofit status of funded social ventures ($\beta = -.13, p < 0.001$) are negative and statistically significant, whereas the coefficient for the organization age ($\beta = .16, p < 0.001$) is positive and statistically significant. The coefficient estimates of all control variables remain significant in the same direction throughout analysis. The negative coefficient for the nonprofit status of funded social ventures is somewhat surprising, because one can relate superior social performance with funding nonprofit social ventures rather than for-profit ventures.

Model 2 offers the assessment of hypotheses 10, 12, 14, 16 and 18 that investigate main effects of EO and institutional pressures on social performance. A coefficient for EO (hypothesis 10) is neither statistically significant nor consistent with the hypothesis ($\beta = -.04, n.s.$). This relationship remains unchanged in the full model ($\beta = -.04, n.s.$), suggesting that hypothesis 10 is not supported. Considering that many prior studies find a positive relationship between EO and performance (Lumpkin & Dess, 2001; Wiklund & Shepherd, 2003, 2005), this result was not highly expected. I will discuss results of additional analysis on the relationship of performance-EO in the last section of this chapter.

Hypothesis 12 postulates a positive relationship between the nonprofit status and social performance. Recall from the correlation matrix in Table 3.16 that the nonprofit

status was significantly and positively correlated with social performance. Unlike the correlation, the estimated coefficient is neither statistically significant, nor positive ($\beta = -.03$, n.s.). This negative coefficient remains insignificant in the two-way interaction model ($\beta = -.02$, n.s.). As such, hypothesis 12 fails to receive support.

Hypothesis 14 argues that donors' and investors' demand for funding outcomes should have a positive effect on social performance (hypothesis 14a), but donors' and investors' demand for financial outcomes should have a negative effect on it (hypothesis 14b). As shown in Table 4.5, donors' and investors' demand for social outcomes has a positive and significant coefficient in both the main effects model and in the interaction model ($\beta = .17$, $p < 0.001$), offering support for hypothesis 14a. On the other hand, donors' and investors' demand for financial outcomes has a marginally significant, yet positive, coefficient in both models ($\beta = .07$, $p < 0.1$), suggesting that hypothesis 14b is not supported.

Hypotheses 16 postulate that positive relationship exists between social performance and affiliation with traditional grantmaker professional associations (hypothesis 16a), whereas a negative relationship exists between social performance and affiliation with venture capital professional associations (hypothesis 16b). Results in Table 4.5 do not offer support for this hypothesis. In the main effects model, the coefficient for affiliation with grantmaker professional associations is in the hypothesized direction, but it fails to achieve a statistically significant level ($\beta = .06$, n.s.). The coefficient remains statistically insignificant in the two-way interaction model. On the other hand, the coefficient for affiliation with venture capital professional associations is statistically significant, but the direction is not consistent with the hypothesized direction

in the main effects model ($\beta = .09, p < 0.05$) and the interaction model ($\beta = .12, p < 0.01$), suggesting that the hypothesis fails to receive support.

Hypothesis 18 suggests a positive effect of the management team's training in nonprofits (hypothesis 18a) and a negative effect of the management team's training in business (hypothesis 18b). The coefficient for training in nonprofits is positive and statistically significant throughout analysis ($\beta = .23, p < 0.001$), suggesting that hypothesis 18a is supported. The coefficient for training in business is in the hypothesized direction ($\beta = -.04$), yet is not statistically significant. However, the coefficient turns out to be marginally significant in the hypothesized direction in the interaction model ($\beta = -.06, p < 0.1$), suggesting that hypothesis 18b receives support in the most conservative model.

In sum, the main effects model for social performance analysis provides mixed results with support for hypothesis 14a (donors' and investors' demand for social outcomes), 18a (the management team's training in nonprofits) and 18b (the management team's training in business).

Results of the Two-way Interaction Model: EO Moderating Effects on the Venture Capital Institutions-Social Performance Relationship (Hypotheses 20–22)

I estimated the two-way interaction model by testing hypotheses 20, 21, and 22. Here, the negative effects on social performance originate from the venture capital field. According to hypotheses 20, 21, and 22, if a higher level of EO interacts, the negative effects of the venture capital institution turn positive. As shown in Table 4.5, the two-way interaction model examines three venture capital institution variables, i.e., donors'

and investors' demand for financial outcomes (hypothesis 20), affiliation with venture capital professional associations (hypothesis 21), and the management team's training in business (hypothesis 22). Two interaction terms have a positive coefficient, but fail to reach a statistically significant level: EO x donors' and investors' demand for financial outcomes ($\beta = .03$, n.s.) and EO x management team's training in business ($\beta = .05$, n.s.). The interaction term of EO and affiliation with venture capital associations obtained a marginally significant coefficient, but is not in the hypothesized direction ($\beta = -.06$, $p < 0.1$). Given these results, hypotheses 20, 21, and 22 are not supported.

Results of the Main Effects Model: Effects on Financial Performance (Hypotheses 11, 13, 15, 17 and 19)

The results of hypotheses for financial performance analysis are displayed in Tables 4.7 and 4.8. Table 4.7 overviews the coefficients estimated from three models. Model 1 finds only a statistically significant coefficient for the organization age ($\beta = .09$, $p < 0.05$). Although some coefficients are not statistically significant, it is noteworthy that the direction of coefficients for all control variables remains the same across different models for social performance analysis and financial performance analysis.

Hypothesis 11 postulates that EO and financial performance are positively related. The main effects model reports that EO has a positive and marginally significant coefficient ($\beta = .06$, $p < 0.1$). The coefficient, however, fails to maintain the significant level in the full model. As such, hypothesis 11 is partially supported only in the main effects model.

Hypothesis 13 argues a negative effect of the nonprofit status on financial performance. This hypothesis is not supported, because the coefficient is neither significant nor consistent with the hypothesized direction.

Hypothesis 15 investigates a negative impact of donors' and investors' demand for social outcomes and a positive impact of donors' and investors' demand for financial outcomes on financial performance. This hypothesis is partially supported. The coefficient for donors' and investors' demand for social outcomes is statistically significant in the hypothesized direction ($\beta = -.10, p < 0.05$) and this remains the same throughout analysis, providing support to hypothesis 15a. On the contrary, donors' and investors' demand for financial outcomes is neither significant nor consistent with the hypothesis, failing to support hypothesis 15b.

Hypothesis 17 assesses impacts of affiliation with professional associations on financial performance. The coefficients for both affiliation with grantmaker professional associations ($\beta = .12$) and affiliation with venture capital professional associations ($\beta = -.12$) are statistically significant at the level of .01 throughout analysis. However, the direction of coefficients for both predictors is opposite the hypothesized directions, and as such, hypothesis 17 fails to receive support.

Hypothesis 19 finds partial support. The management team's training in business is in the hypothesized direction at the significant level of .001 in the main effects model ($\beta = .23, p < 0.001$). This direction remains the same in the full model ($\beta = .22, p < 0.001$), offering support for hypothesis 19b. Hypothesis 19a, however, is not supported. The coefficient for the management team's training in nonprofits is not significant

throughout analysis, although the direction is consistent with the hypothesis ($\beta = -.03$ in the main effects model, $\beta = -.02$ in the interaction model).

Results of the Two-way Interaction Model: EO Moderating Effects on the Philanthropic Institutions-Financial Performance Relationship (Hypotheses 23–26)

I tested hypotheses 23, 24, 25 and 26 by estimating the two-way interaction model for moderating effects on financial performance. Four different factors of the traditional philanthropic field, which negatively influence financial performance, were proposed: (1) the nonprofit status; (2) donors' and investors' demand for social outcomes; (3) affiliation with grantmaker professional associations; and (4) the management team's training in nonprofits. Accordingly, I created four interaction terms by multiplying the centered variable of EO and each of these institutional factors. These interaction terms were then entered in the moderated regression analysis.

Tables 4.7 and 4.8 show none of the four interaction terms is statistically significant. It is pointed out that the coefficients for three out of four interaction terms are in the hypothesized direction ($p = .03$ for EO x the nonprofit status; $p = .01$ for EO x donors' and investors' demand for social outcomes; $p = .01$ for EO x affiliation with grantmaker professional associations). Values of the adjusted R^2 decreased, however, from the main effects model to the full model as shown in Table 4.7. This undermines a fit for the model and thus negates a possibility of interaction effects in this model (Cohen et al., 2003).

Analysis on EO-Performance Relationships by EO Sub-dimension Measures

Despite the varying magnitude of the relationships, cumulative knowledge in the entrepreneurship field suggests that EO leads to higher business performance (Rauch et al., 2009). As Table 4.9 shows, the prior research in the nonprofit context finds mixed results about the relationship between EO and performance, also.

Table 4.9. Selected Studies About the EO-Performance Relationships in the Nonprofit Context

Authors	Sample	Findings about EO-performance relationships
Coombes, Morris, Allen & Webb (2011)	140 arts and culture nonprofits	<ul style="list-style-type: none">• EO is associated with social performance, but not financial performance.
Helm & Andresson (2010)	108 nonprofits in Kansas City	<ul style="list-style-type: none">• EO is not related to revenue measures and nonrevenue measures of performance.
Morris, Coombes, Schindehutte & Allen (2007)	145 social service nonprofits in Upstate New York	<ul style="list-style-type: none">• External environment does not moderate the EO-performance relationship.• EO is not associated with financial performance.
Pearce, Fritz & Davis (2010)	252 religious congregations in MN, PA, NE, and NC	<ul style="list-style-type: none">• EO has positive effect on performance.• Innovativeness, autonomy and environmental munificence are positively related to performance, but proactiveness, competitive aggressiveness, and risk seeking are not.

Interestingly, Morris and his co-authors consistently have reached a conclusion that EO is not associated with superior financial performance, whereas it is associated with social performance (Coombes et al., 2011; Morris et al., 2007). Recall that in my study, the result is quite different. Pearce et al. (2010) also dictates that the relationship with performance varies across salient sub-dimensions of EO.

Given these varying results of prior studies, I examined how EO is associated with social versus financial performance in three sub-dimension measures. Table 4.10

lists the correlations and coefficients for social performance and financial performance in different measures of EO. The results offer strong support for a notion that proactiveness is positively and significantly associated with both social and financial performance. Risk taking has a significant and negative—not positive, as hypothesized—impact on social performance.

Table 4.10. Comparison of Results: Analysis on Effects on Social and Financial Performance by 4 Measures

	Aggregated EO	Innovativeness	Proactiveness	Risk- taking
<i>Social performance</i>				
Correlation with EO/sub-dimension	r = -.01 (n.s.)	r = -.04 (n.s.)	r = .11 (p < 0.01)	r = -.08 (p < 0.05)
Coefficient from the interaction model	p = -.04 (n.s.)	p = -.03 (n.s.)	p = .08 (p < .05)	p = -.11 (p < .01)
<i>Financial performance</i>				
Correlation with EO/sub-dimension	r = .05 (n.s.)	r = .01 (n.s.)	r = .10 (p < 0.01)	r = .001 (n.s.)
Coefficient from the interaction model	p = .06 (p < 0.1)	p = .01 (n.s.)	p = .13 (p < 0.05)	p = .04 (n.s.)

Summary

This chapter examines and assesses the model fit and results of the moderated regression analyses on main effects and moderating effects on SIFs' venture philanthropy behaviors (Study 1) and social and financial performance (Study 2). The chapter also discusses results of several post-hoc analyses of this dissertation such as analyses on EO subdimension measures and a subgroup analysis. The next chapter will first review the results of all analyses introduced in the current chapter, and then propose theoretical implications and contributions, methodological limitations, and suggestions for future research.

CHAPTER 5: DISCUSSION AND CONCLUSION

Linking the new institutionalism to entrepreneurial orientation (EO), this dissertation was built from empirical analyses of 146 organizations in the emerging field, illustrating the institutional duality—the SIF field shaped by two contrasting mature institutions, namely traditional philanthropy and mainstream venture capitalism. This chapter begins by summarizing the results for two empirical studies, followed by discussing theoretical implications and contributions to nonprofit and philanthropic studies, social entrepreneurship, the new institutionalism, and EO. The chapter concludes with an examination on the study’s limitations and directions for future research.

Summary of The Results

A total of 26 hypotheses were developed and tested by two studies: Study 1 investigating effects on venture philanthropy practices (hypotheses 1–9); and Study 2 investigating effects on social performance and financial performance (hypotheses 10–26). Table 5.1 and Table 5.2 display the results of hypotheses testing for main effects and moderating effects, respectively. These tables show whether (1) the hypotheses were “supported” (i.e., a coefficient is significant in the hypothesized direction); (2) the hypotheses were “not supported” (i.e., a coefficient is significant but the direction is not consistent with a hypothesis); or (3) the results were “not significant (n.s.)” with the direction “consistent” or “not consistent” with a hypothesized direction.

Table 5.1. A Summary of Comparative Results: Main Effects on Venture Philanthropy Practices (Study 1) and Social and Financial Performance (Study 2)

Theoretical perspective		Independent variable	Study 1	Study 2	
			Venture philanthropy practices	Social performance	Financial performance
EO		EO	H1 (+) <i>Supported</i>	H10 (+) n.s. (direction is not consistent)	H11 (+) <i>Supported</i>
Regulative	Attribute	The nonprofit status	H2 (-) <i>Supported</i>	H12 (+) n.s. (direction is not consistent)	H13 (-) n.s. (direction is not consistent)
Regulative	Linkage	Donors'/investors' demand for social outcomes	H3a (-) n.s. (direction is not consistent)	H14a (+) <i>Supported</i>	H15a (-) <i>Supported</i>
		Donors'/investors' demand for financial outcomes	H3b (+) <i>Supported</i>	H14b (-) Not supported	H15b a (+) n.s. (direction is not consistent)
Normative	Linkage	Affiliation with grantmaker professional associations	H4a (-) <i>Supported</i>	H16a (+) n.s. (direction is consistent)	H17a (-) Not supported
		Affiliation with venture capital professional associations	H4b (+) <i>Supported</i>	H16b (-) Not supported	H17b a (+) Not supported
Normative	Attribute	Management team's training in nonprofits	H5a (-) Not supported	H18a (+) <i>Supported</i>	H19a (-) n.s. (direction is consistent)
		Management team's training in business	H5b (+) <i>Supported</i>	H18b (-) <i>Supported</i>	H19b (+) <i>Supported</i>

The signs within the parentheses indicate the direction of the relationship between a dependent variable (DV) and an independent variable (IV). The plus (+) indicates that IV and DV are positively related and the minus (-) indicates that IV and DV are negatively related.

Table 5.2. A Summary of Comparative Results: Moderating Effects on Venture Philanthropy Practices (Study 1) and Social and Financial Performance (Study 2)

Theoretical perspective		2-way interaction term	Study 1	Study 2	
			Venture philanthropy practices	Social performance	Financial performance
EO -Regulative	Attribute	EO x the nonprofit status	H6 (+)	N/A	H23 (+)
			<i>Supported</i>	(Not tested)	n.s. (direction is consistent)
EO -Regulative	Linkage	EO x donors'/investors' demand for outcomes	H7 (+)	H20 (+)	H24 (+)
			n.s. (direction is not consistent)	n.s. (direction is consistent)	n.s. (direction is consistent)
EO -Normative	Linkage	EO x affiliation with professional associations	H8 (+)	H21 (+)	H25 (+)
			Not supported	Not supported	n.s. (direction is consistent)
EO -Normative	Attribute	EO x management team's training	H9 (+)	H22 (+)	H26 (+)
			n.s. (direction is not consistent)	n.s. (direction is consistent)	n.s. (direction is not consistent)

The signs within the parentheses indicate the direction of the relationship between a dependent variable (DV) and an independent variable (IV). The plus (+) indicates that IV and DV are positively related and the minus (-) indicates that IV and DV are negatively related.

Results for the Main Effects on Venture Philanthropy Practices (Study 1) and on Social and Financial Performance (Study 2)

Main effects analyses were conducted to answer the first guiding question of this dissertation: “Do EO and/or institutional pressures independently affect practices and performance of organizations embedded in the dual institutions?” To answer this question, models based on two sets of dependent variables were analyzed: (1) venture philanthropy practices (Study 1); and (2) social and financial performance (Study 2).

As seen in Table 5.1, Study 1 lent strong support to six out of eight hypotheses tested for analysis on main effects of EO and institutional pressures. It is noteworthy that EO and all regulative and normative variables of the venture capital institution (donors’ and investors’ demand for financial outcomes, affiliation with venture capital professional associations, and the management team’s training in business) were found, as hypothesized, to have a positive effect on the extent of venture philanthropy practices. On the other hand, the results of hypotheses for philanthropic institutional pressures were mixed. Two out of four variables representing philanthropic institutions—the nonprofit status and affiliation with grantmaker professional associations—were found, as hypothesized, to have a negative impact on venture philanthropy practices. However, hypotheses developed for donors’ demand for social outcomes and the management team’s training in nonprofits failed to receive support. Nonetheless, it is reasonable to conclude from these results, coupled with the strong model fit and results from the post hoc analyses, that EO and institutional pressures can be major determinants of SIFs’ venture philanthropy practices—strategic behaviors by organizations embedded in the institutional duality.

On the contrary, Study 2 did not lend strong and consistent support to the hypotheses. EO was found to have a positive impact on financial performance, but not on social performance. However, following suggestions by prior research (Guo et al., 2009; Morris et al., 2011; Pearce et al., 2010) about unique effects of EO sub-dimensionality in the nonprofit context, I conducted further analysis to investigate how each dimension of EO (innovativeness, proactiveness, and risk taking) is related to social and financial performance. This post hoc analysis has found a statistically significant and positive relationship between proactiveness and both social performance and financial performance.

Interestingly, the nonprofit status variable, which showed strong support of hypotheses in Study 1, did not support hypotheses in Study 2. Two variables were, however, found to be consistent with the hypotheses across social and financial performance: donors' and investors' demand for social outcomes and the management team's training in business. Despite these hypotheses being supported, it should be reminded that R^2 (.17, $p < .001$) and adjusted R^2 (.15, $p < .001$) of the main effects model in Study 2 were substantially small, relative to R^2 (.51, $p < .001$) and adjusted R^2 (.50, $p < .001$) of the main effects model in Study 1. These low figures of R^2 and adjusted R^2 undermine results from the overall hypotheses test of Study 2 (Cohen et al., 2003).

Results for the Moderating Effects on Venture Philanthropy Practices (Study 1) and on Social and Financial Performance (Study 2)

Moderating effects analyses were conducted to answer the second guiding question of this dissertation: Does EO help organizations resist institutional negative

pressures and still engage in strategic practices and enhance performance despite institutional constraints? I examined this question by analyzing the models based on two sets of dependent variables.

By following Oliver's (1991) agency view of the new institutionalism, I developed and tested hypotheses for the moderating effects model, arguing that SIFs with a higher level of EO are more likely to engage in venture philanthropy practices against the pressure of the philanthropic institution in which they are deeply embedded. It was also assumed that without an effect of EO, SIFs simply conform to environmental demand of traditional philanthropy institutions and avoid carrying out a business-based model of venture philanthropy. A negative relationship between venture philanthropy practices and philanthropic institutional pressures alone, which the main effects model may have found, were expected to turn into a positive relationship with the EO-institution interaction term added. Likewise, a negative relationship between social performance and venture capital institutional pressures would become positive if EO interacts; so would a negative relationship between financial performance and philanthropic institutional pressures become positive.

As Table 5.2 shows, both Study 1 and Study 2 do not lend strong support to my hypotheses, except one—hypothesis 6 that postulates a moderating effect between the nonprofit status and EO. The fact that most hypotheses developed for moderating effects were not supported should not be too surprising, considering that many methodologists have noted how rare it is to report strong, unambiguous results in support of a moderator effect (Bobko, 1986; Cronbach, 1987; Mathieu, Aguinis, Culpepper, & Chen, 2012; Russell & Bobko, 1992; Venkatraman, 1989).

Nevertheless, moderated regression and two post hoc analyses have confirmed that the interaction effect exists between the nonprofit status and EO. This finding reinforces Oliver's (1991) argument that organizations, if entrepreneurial in my hypotheses based on the new institutionalism and EO, are capable of resisting traditional philanthropy's regulative pressures that are coercing SIFs to avoid engaging in business-based practices otherwise. This result will be further discussed below as part of the main contribution of my dissertation in advancing institutional theory and EO.

Contributions and Theoretical Implications

Chapter 1 has identified gaps in the prior literature on nonprofit and philanthropic studies, social entrepreneurship, the new institutionalism and EO (Table 1.2). Possible limitations notwithstanding, my dissertation is intended to contribute to these four scholarly fields by filling these gaps.

Contribution to Nonprofit and Philanthropic Studies: Theory-Grounded Analysis on Venture Philanthropy

First, and most fundamentally, this dissertation contributes to nonprofit and philanthropic studies by enhancing our understanding about venture philanthropy through theory-grounded and systematic analysis, the need for which has been addressed (Van Slyke & Newman, 2006) yet has been filled to date by very few theory-grounded studies (Moody, 2008). Through a theoretical lens of the new institutionalism and EO, my dissertation is poised to answer a vital question originating from the substantial heterogeneity of organizational processes and structures within the SIF field: Why do

some organizations engage in venture philanthropy while others do not? Relative to other scholars who tended to focus on either organizations' internal characteristics (Anheier & Leat, 2006; Fleishman, 2009; Letts et al., 1997; Prewitt, 2006b) or on environmental and inter-organizational relations with organizations (Moody, 2008), I took a contingency approach by examining how both an internal factor (EO) and environmental factors (institutional pressures) independently and jointly affected organizations.

“Understanding venture philanthropy” does not mean that this dissertation endorses this highly controversial concept in philanthropy. Notwithstanding, venture philanthropy is a topic worthy of more scholarly examination because of its potential for theory advancement (Moody, 2008)—not only within our own field of nonprofit and philanthropic studies, but in other scholarly fields, as this dissertation has shown, such as institutional theory and EO. I am arguing here that this approach not only benefits nonprofit and philanthropic studies itself, but also enhances its legitimacy in academia.

To be legitimate, a field must establish its own ontological and epistemological base, and to do so, it must be recognized by scholars in other fields of research (Busenitz et al., 2003). Academic legitimacy, however, will not be fully achieved through borrowing and applying theories from other fields. Despite the undoubted usefulness of their findings to nonprofit and philanthropic studies, most EO studies published in major nonprofit scholarly journals, such as *Nonprofit and Voluntary Sector Quarterly* (e.g., Davis, Marino, Aaron, & Tolbert, 2011) and *Nonprofit Management and Leadership* (e.g., Helm & Andersson, 2010), to date have applied EO to the nonprofit context without making a larger theoretical impact in other scholarly fields. Because “legitimation is

frequently mutualistic” (Suchman, 1995, p. 597), achieving academic legitimacy entails mutual contributions to theory advancement between different fields. My dissertation is intended to show how analysis on philanthropic organizations can expand theoretical implications of other scholarly domains, as well as adding new insights on one of the most significant and controversial topics of our own field (Frumkin, 2008).

Contribution to Social Entrepreneurship: Theory-Driven and Quantitative Analysis by Systematic Data Scrutiny and Theory Testing

This dissertation intends to make not only a theoretical but also a methodological contribution to advancing the field of social entrepreneurship. As Short and his co-authors (Short et al., 2009) have stressed, social entrepreneurship, despite all the growing excitement on this topic, will remain marginal as a scholarly field unless a more serious academic effort is made to advance theory by quantitative analysis and theory testing. Nevertheless, a lack of systematic data adequate to use for statistical analysis has been a main obstacle to the development of social entrepreneurship (Van Slyke & Newman, 2006). To tackle this, I gathered original data from 146 organizations.

Collecting valid data is vital for research. Thus, I utilized many methods recommended to assure the validity of data and minimize threats of potential biases during the entire data collection and evaluation processes. Scale items were developed both inductively and deductively, following Hinkin's (1995, 1998) recommendations. I used mixed mode survey methods suggested by Dillman (Dillman, Smyth, & Christian, 2009; Dillman, 1991); further I used a greater number of data sources to identify a larger population of interest than that used by previous SIF studies (Miller & Wesley, 2010;

Scarlata & Alemany, 2008, 2010). These attempts enabled this empirical study to achieve a much higher response rate (53.7 percent)—twice as high as that of other empirical studies analyzing nonprofit EO, SIFs or other venture capital funds¹⁸. Scholars often discuss that data collection on independent and dependent variables may have introduced common method bias, especially if data are collected through the same survey (Stam & Elfring, 2008). Thus, the use of both primary and secondary data sources to identify sample organizations and different survey modes (Internet, mail, phone or meetings) were addressed in this study to minimize a threat of common method bias. Rogelberg and Stanton's (2007) nonresponse bias impact assessment strategy (N-BIAS) was further implemented to ensure data of this study do not suffer nonresponse error. Furthermore, to avoid introducing biases in estimates of regression analysis, I conducted multiple imputation analysis to treat the missing values in my dataset. Multiple imputation analysis has been developed by missing value theorists and statisticians as a superior method to other more common methods to treat missing values, such as listwise deletion (Little & Rubin, 2002; Little, 1988; Rubin, 1987, 1996; Schafer, 2010). In sum, this dissertation implemented multiple methods to assure validity of data.

I am not intending to imply that my dissertation has contributed directly to a discipline of research methodology, but rather that it has carefully employed essential methods for validity of data, as it is vital to be able to analyze data by moderated multiple regressions for theory testing. Yet it is also undisputable, from the recent survey research on social entrepreneurship, that most prior studies of social entrepreneurship have been of an exploratory nature and have fallen short of rigorous hypothesis testing for theory

¹⁸ Examples of the responses of those studies include: 22 percent in Davis, Marino, Aaron, & Tolbert (2011); 26.3 percent in Helm & Andersson (2010); 20.7 percent in Miller & Wesley (2010); 21 percent in Morris, Coombes, Schindehutte, & Allen (2007); and 19 percent in Shepherd (1999).

advancement. Available data have also remained uneven and not suited to use for most statistical methods. In this regard, my dissertation has made a meaningful contribution to social entrepreneurship.

Contribution to the New Institutionalism and EO

Analysis on Institutional Pressures and EO: Factors Affecting Strategic Practices and Performance of Organizations Embedded in the Institutional Duality

This dissertation makes several contributions to the new institutionalism. Drawing on theoretical implications of EO and the new institutionalism, I examined how organizations' internal factors (EO) and external factors (regulative and normative pressures deviating from institutional environments) shaped behaviors of organizations embedded in the institutional duality.

First, my analyses on the main effects of these factors contribute to the new institutionalism, and entrepreneurship research as well, by investigating how competing pressures from two distinct institutional fields shape strategic behaviors and performance of organizations that have a mixed motif of social and economic ends. As reviewed in Chapter 1, entrepreneurship scholars tend to utilize an institutional perspective to examine a group of organizations between different countries or economies at the field level (Bruton et al., 2010, 2008; Busenitz et al., 2000; Zacharakis et al., 2007). However, there appears to be very limited effort in entrepreneurship research to analyze how competing institutional logics shape processes and behaviors of entrepreneurial organizations within the same institutional field. My analysis has addressed this gap as the focal point.

On the other hand, institutional scholars tend to analyze adaptation processes of organizations facing the institutional duality (e.g., pressures from host countries and parent multinational corporations upon foreign subsidiaries, Hillman & Wan, 2005; Kostova & Roth, 2002), but not organizations' performance. Thus, my dissertation makes an additional contribution to institutional theory by investigating how competing institutional pressures affect not only strategic practices, but also social and financial performance of organizations facing the institutional duality.

***Analysis on EO Moderating Effects on Institution-Strategic Practice Relationship:
Agentic Responses to Institutional Pressures***

As emphasized in Chapter 1, the ultimate objective of my dissertation is to respond to the “structure versus agency debate”—the most central quarrel dividing institutionalists (Hirsch & Lounsbury, 1997)—to determine whether organizational behavior is the product of macro social forces or of organizational agency. My second research question exploring a moderating effect of EO on the relationship between institution pressures and venture philanthropy practices (Study 1), and institution pressures and performance (Study 2), served to answer this. To develop hypotheses for moderating effects tests, I followed Oliver's view (1991) that increased institutionalization can actually become a source of deviation of entrepreneurial organizations. That is, as Oliver (1991) advocated over two decades ago, organizations are capable of strategically responding to and shaping institutional forces, and thus I will assert that organizational behavior is not the product of macro social forces only, but of organizational agency, as well.

This translates into my theory in this study postulating that SIFs with a higher level of EO are more likely to resist institutional constraints from traditional philanthropy or mainstream venture capitalism and still engage in venture philanthropy practices and enhance performance. As discussed above, while I could not find a moderating effect of EO on the relationship between institutional pressures and performance variables, I could confirm a moderating effect of EO on the relationship between institutional regulative pressure (the nonprofit status) and SIFs' strategic practices. This finding of an EO moderating effect buttresses a position of the agency camp, arguing that if organizations are innovative, proactive, and willing to take a risk, they can reshape institutional pressures and achieve their goals.

It is noteworthy that EO was found to interact in particular with the nonprofit status, i.e., the source for regulative pressures (Scott, 2008b) from governmental (the IRS) mandate upon organizational goals and behaviors. This finding reflects implications from prior literature and offers further interesting theoretical implications. Institutional theorists (DiMaggio & Powell, 1983) have suggested that governmental regulations and laws are the most coercive and forceful pressures on organizations. Philanthropic scholars have pointed out that tax-exempt status makes philanthropic organizations extremely vulnerable to a loss of public legitimacy (Frumkin, 2008) because as subsidiary theory dictates, their very existence is made possible by public acceptance (Simon et al., 2006). Entrepreneurship scholars (Kistruck & Beamish, 2010) have found nonprofits are less successful at adapting new entrepreneurship activities than for-profits due to the path dependencies created by their own individual actions. All these theoretical perspectives thus indicate that constraints from the nonprofit status are

possibly the most negative pressure forcing SIFs to avoid engaging in a business-based model of venture philanthropy. And, findings from this study indicate that in such an adverse condition, EO plays the most critical role in enabling organizations to enact strategic responses to institutional pressures.

Analysis on EO as a New Enabling Condition of Institutional Entrepreneurship

In my study, EO was theorized to function as a factor in enabling organizations to create a strategic response to institutional environments. As reviewed in Chapter 1, Oliver (1991) has proposed five institutional antecedents triggering organizations' strategic responses to institutional environments: cause of institutional pressures, constituents exerting these institutional pressures, content of institutional pressures, control of how these institutional pressures are exerted, and context where institutional pressures occur. A slim, yet growing, number of studies have examined and identified conditions enabling institutional entrepreneurship at the organization level, such as actors' sensemaking strategies (Dorado, 2005), partial autonomy from the institution (Mutch, 2007; Seo & Creed, 2002), and empathy and social skills (Fligstein, 1997, 2001). However, no study appears to have examined organizations' innovativeness, proactiveness and risk taking propensity as an enabling condition of institutional entrepreneurship.

Herein, this dissertation makes a meaningful contribution to advance theory of the new institutionalism by adding EO as a condition enabling institutional entrepreneurship when institutional pressures are coercive and regulative. And, by investigating how the EO interacts with institutions' coercive pressures at the organizational level and how EO

empowers each organization to engage in a strategic response to institutional pressures, my analysis is poised to fill another important gap identified by institutional entrepreneurship scholars—a need for analysis on institutional and entrepreneurial effects upon organizations at the micro level (Battilana et al., 2009; Mutch, 2007). This in turn aims to answer the question of “the Paradox of Embedded Agency” (Battilana & D’aunno, 2009; DiMaggio & Powell, 1991a; Hardy & Maguire, 2008), i.e., if actors are embedded in an institutional environment that shapes their cognition, how can they envision change and enact new practices in the contexts in which they are embedded? My empirical study has found EO, under a coercive pressure, to be a factor empowering SIFs to envisage and originate a novel model as a way to “revolutionize” (Moody, 2008) conventional practices in two institutional environments in which they are deeply embedded.

By identifying EO as a possible enabling condition of institutional entrepreneurship if institutional pressure is coercive, this study also makes a meaningful contribution to EO research. As Covin and Lumpkin (2011) draw attention to it, many environmental variables have been identified and extensively tested as moderators for EO-performance relationships, so that there has not been much room left for making additional contribution. Yet, Miller (2011) most recently proposed connecting institutional theory to EO as a new research agenda for theory advancement for EO research. While institutional pressures are deemed as environmental factors (Scott, 2008a), institutional perspectives still can add implications to discussions of organization-environment relations in EO research, because institutional theory assumes that environments shape not only organizational behaviors, but also their cognitive

abilities. As such, EO perhaps needs to play an even more vital role in enabling organizations to resist environmental constraints.

Limitations and Suggestions for Future Research

This study is not without limitations. I will focus my discussions primarily on methodological issues as limitations of this study and also highlight needs and methodological considerations that future research should address.

Missing Data and Common Method Biases

As stressed above, this study employed multiple methods to enhance the validity of data and analysis. Nevertheless, considerable limitations still exist. First, the extent of missing data was significant and should be discussed as a major limitation of my study. Multiple imputation analysis must be used to avoid biased estimates if over 5 percent of data are missing (Allison, 2001; Fichman & Cummings, 2003; Graham, 2009), which is the case in my study. To confirm the validity and usefulness of multiple imputation analysis for my empirical study, numerous regression models were run to determine the best-fit model. Some regression models based on untreated data showed an extremely low or a negative value of R^2 and adjusted R^2 , as opposed to R^2 and adjusted R^2 of the models based on multiple-imputed data (around .50 for the main effects models). This underscores the usefulness of multiple imputation analysis. Nevertheless, no other methods would give us the validity of data more than actual responses from survey participants. Thus, researchers must make the greatest effort to minimize a threat of missing data in their survey datasets.

Second, this study relied on self-reported data from single informants. Their interpretation of internal and external factors of their organizations may not represent the views of other members in the organizations. To reduce and evaluate this potential problem, I used multiple performance measures as well as other methods discussed above to reduce threats of biases. Nonetheless, as discussed in Chapter 3, reliance upon a single reporter has been pointed out as an issue for possible biased responses (Coombes, Morris, Allen, & Webb, 2011; Van Bruggen, Lilien, & Kacker, 2002). The use of a single key informant approach in this study has been justified, because it follows main approaches by prior EO studies (Covin & Slevin, 1989; Miller & Friesen, 1982; Zahra & Covin, 1995) and also because it can avoid a possible reduction of the sample size (Coombes et al., 2011). However, if a reduction of the sample size is not a major concern, future research can consider utilizing a multiple-participant method, as well as other methods such as Harman's one factor test and confirmatory factor analyses (Stam & Elfring, 2008; Wang, 2008).

Given that prior studies on both foundations and venture capital funds suffered from a low response rate, SIFs, which stem from both these groups, can be among the most difficult types of organizations to use for effective survey collection. Thus, it may also be advisable to use service-providing nonprofits (i.e., organizations referred to as "funded social ventures" in this study) because archival data containing their finance and other basic information are more readily available in IRS Form 990. In fact, some nonprofit EO empirical studies (Coombes, Morris, Allen, & Webb, 2011; Morris et al., 2007) targeted arts and culture nonprofits registered with the IRS and used their Form 990 as a data source to construct nonprofit performance (e.g., total revenues, changes in

assets, fundraising expenses). Applying the theories developed in this study to other types of nonprofit and social entrepreneurial organizations can also be useful to enhance generalizability of findings (Cohen et al., 2003). Other possible organizations for future research include community development financial institutions and socially responsible publicly held corporations.

Construct of “Performance” Variables and Qualitative and Longitudinal Studies

Many efforts suggested above for future research, however, point us to another and more serious data problem deeply inherent in the very nature of nonprofits: the construct of “performance” variables. The ability to improve data on nonprofits is hampered by the lack of standards. The large scope and variety of nonprofit organizations complicates the task of collecting comprehensive, reliable, and valid data on nonprofits (Lampkin & Boris, 2002). Performance, which my dissertation used as dependent variables for Study 2, is one of the most difficult concepts to measure in nonprofit and social entrepreneurship research. Not only do they lack consensus about how to define and measure performance of philanthropic grantmaking (Forbes, 1998; Herman & Renz, 1999), but nonprofit scholars and foundation officers have not even agreed whether or not performance measurement itself is appropriate (Kanter & Summers, 1987; Ostrower, 2006). While IRS Form 990 is one of the best sources available for research, as filing is legally required for most nonprofits¹⁹ (Lampkin & Boris, 2002), questions about the quality of the IRS data continue to be of concern.

¹⁹ Lampkin and Boris (2002), however, remind us that nonprofits with less than \$25,000 in gross receipts and religious congregations or related organizations are not included in IRS Form 990 data (All private foundations must file a Form 990-PF annually, regardless of size.).

Froelich, Knoepfle and Pollak (2000) investigate the adequacy, reliability, and appropriate interpretation of IRS 990 Return data through comparisons of selected entries with corresponding measures from each organization's audited financial statements. The study concludes that the IRS 990 Return can be an adequate and reliable source of information for basic income statement and balance sheet entries (total income, total expenses, total assets, and total liabilities), and to a lesser but still reasonable degree, for additional variables of traditional interest to nonprofits, including total contributions, program service revenue, program service expenses, and fund-raising expenses. However, market-based financial variables highly relevant to social entrepreneurship performance, such as gross profit from sales, were found to require caution to use and interpret.

Single indicators have typically been used to operationalize social and financial performance of organizations whose chief motif is not profit-maximizing (Pearce, Fritz, & Davis, 2010). However, a multidimensional approach to capturing performance should be used when investigating the effects of EO, as outcomes may be favorable in some dimensions but not in others (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005). Multidimensionality is especially important to measure social performance, due to the idiosyncratic nature of philanthropy (Frumkin, 2008) and a lack of standardized methods capturing social performance (Kanter & Summers, 1987). Hence, I operationalized social performance as an index of eight performance measures.

Multiplicity of social performance justifies the method taken in this study to construct performance variables in a way that these variables reflect expressive and instrumental aspects of philanthropy (Frumkin, 2008). Nevertheless, a complexity of

constructs in my study may also have induced confusion among some survey respondents. This assumption stems from the fact that most other EO studies on nonprofits used a single and/or more specific performance dimension and more hypotheses were supported for EO/performance relationship in their studies (Coombes et al., 2011; Pearce et al., 2010) than this study. Given that measuring performance is of central importance to social entrepreneurship research, there is a need for more scholarly attention to the development of valid measures of different types of performance applicable to the nonprofit context.

While most studies of EO and performance use cross-sectional designs (Wiklund & Shepherd, 2005), my cross-sectional data possibly fail to capture the dynamic interplay between EO and institutional forces, as it may take considerable time for the effects of EO to materialize (Lumpkin & Dess, 1996). As Venkatraman (1989) argues that longitudinal designs are needed in configurational studies, longitudinal studies should be conducted to accurately access moderating effects between EO and institutional forces. To empirically test whether an EO actually leads to better performance, longitudinal data are necessary where EO is measured at one point in time and performance outcomes are measured later. Using qualitative data should be suggested to investigate how moderating effects between EO and institutional forces are materialized in social performance.

Issues in Detecting Moderating Effects and Future Methodological Consideration

The biggest challenge in this study is to detect moderating effects. Since finding moderation effects of EO-institutional pressure lies at the heart of my central argument for theory advancement, an inability to detect strong moderating effects has imposed the greatest dilemma throughout my research. However, this problem is not uncommon. Scholars have found the statistical power to detect interaction effects as a serious concern (Russell & Bobko, 1992) and how rare it was to obtain strong, unambiguous results in support of a moderator effect (Aguinis, 1995; Bobko, 1986; McClelland & Judd, 1993; Venkatraman, 1989). For example, Terborg (1977) reviewed 14 articles containing 20 tests of an interaction between motivation and ability—universally accepted models of work performance—and found only five results supportive of the interaction effect.

Some recommendations have been made by methodologists for improving the possibility of detecting a strong and accurate moderating effect. First, a bigger sample size will be necessary to detect an interaction effect, in particular a larger interaction effect²⁰ (Cohen et al., 2003). Given that a higher power of a model is critical to detect a strong and accurate interaction effect, Aguinis (1995) has reported several artifacts influencing the power of moderated multiple regressions, including error variance heterogeneity resulting from unequal subgroup sample size conditions (Alexander & DeShon, 1994). The sample I used in this dissertation has a much larger size of a nonprofit subgroup as opposed to a for-profit subgroup. Thus, in future research, “commercial nonprofits” may be used because these nonprofits often coexist with and

²⁰ For instance, Cohen, Cohen, West and Aiken (2003) suggest that when each predictor has reliability of 0.88, the required sample size for power .80 to detect an interaction ranges from 100 to 150 or more, depending on the amount of variance accounted for by the main effects of X and Z. And, for a small effect size interaction, the required sample size for 0.80 power to detect an interaction may exceed 1,000 cases when the reliabilities of the individual predictors are each 0.80.

compete against a large number of for-profit counterparts so that an unequal subgroup sample size should no longer be an issue. “Scale coarseness”²¹ has also been identified as an artifact that adversely affects the statistical power of moderated multiple regression to detect moderating effects (Aguinis, 1995; Russell & Bobko, 1992; Russell, Pinto, & Bobko, 1991). For instance, Russell and Bobko (1992) recommend that investigators not attempt to discover moderator effects unless the overt measurement scale contains at least as many response options as exist in the theoretical response domain, or consider other methods of providing subjects with continuous response scales.

Along this line of discussion, the potential of using other statistical methods has been explored among methodologists, while moderating multiple regressions have been the most widely used by EO scholars (Barringer & Bluedorn, 1999; Becherer & Maurer, 1997; Bhuian et al., 2005; Covin et al., 1994; Covin & Slevin, 1988, 1989; Dess et al., 1997; Richard et al., 2004; Wiklund, 1999) and institutional scholars (Dickson & Weaver, 1997; Liao, Welsch, & Stoica, 2003; Oliver, 1997a, 1997b; Sherer & Lee, 2002) to detect an interaction effect. For instance, Williams, Edwards and Vandenberg (2003) have discussed a use of moderated structural equation models. Despite the potential of it, Cortina, Chen and Dunlap (2001) have cautioned that moderated structural equation models present several major challenges, including a challenge involving how to choose indicators to represent the latent product term.

²¹ “Scale coarseness” generally refers to operationalizing a criterion variable in such a manner that it does not include sufficient scale points, incurs possible information loss, and thus prevents a hypothesized moderating effect from being detected (Russell & Bobko, 1992).

Conclusion

This dissertation research is motivated by responding to the “agency versus structure debate” of the new institutionalism—the central quarrel dividing institutional theorists. Drawing upon Oliver’s (1991) proposition, my endeavor originates from an assumption that EO could provide a possible answer to this debate. By linking the new institutionalism to EO, my dissertation simultaneously is poised to answer a call from Miller (2011) that we should explore how institutions’ regulative and normative pressures shape EO. The most vital role I hope this study plays is supporting our collective efforts to advance scholarship of nonprofits, philanthropy and social entrepreneurship. Notwithstanding several noticeable limitations in my study, I hope to see findings of this dissertation “empower,” and not “constrain,” future research endeavors on investigating various roles that EO may play in enabling organizations to strategically respond to institutional environments.

Appendix A: Survey Instrument



Survey on Venture Philanthropy and Impact Investing: Factors Affecting Performance of Funding Social Enterprises

Thank you for your participation in the study on venture philanthropy and impact investing by the Center on Philanthropy at Indiana University. The objective of this study is to investigate a variety of underlying factors that may affect return to/performance of the funding efforts and the social enterprises to which the funds were given.

1. The survey will take **approximately 5 – 10 minutes**. For your convenience, most questions will require simply checking boxes.
2. **Your responses are strictly confidential** and will never be released in association with your organization's name. The survey will not ask you for your organization's confidential performance data, either.
3. Please note that while this study uses the term **social enterprise**, it does **not intend to limit the term to organizations that engage only in commercial activities**. Instead, the term refers broadly to both nonprofit and for-profit organizations, whose main purpose is to create social value. In this survey, social enterprises are **the specific organizations your organization funds**.
4. The term **funding** refers to your organization's provision of financial resources to social enterprises, including grantmaking, equity investment, and loans.
5. If you have any questions, please do not hesitate to contact:

Tamaki Onishi
The Center on Philanthropy at Indiana University
550 West North Street, Suite 301
Indianapolis, IN 46202
tonishi@iupui.edu
(646) 322-0237

Thank you for participating in this research project.

A copy of the aggregated results from the survey will be sent to you once the study is completed.

Part I: General Information

1. What is the legal structure of your organization? If your organization is a local chapter of a larger national/international organization, please provide the information about the chapter.

- ☐ Public charity 501(c)(3)
- ☐ Limited liability company, limited partnership, or other business firm
- ☐ Other structure (Please specify: _____)
- ☐ Unincorporated (Please describe: _____)

2. In what year was your organization founded? _____

3. Is your organization currently affiliated with any of the following professional associations? **Formal affiliations** are via formal membership. **Informal affiliations** are via any other ways including conference/seminar participations, informal networking, or affinity groups.

	Formal affiliation	Informal affiliation	No affiliation
Council on Foundations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Venture Capital Association	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other grantmaker association(s) (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other venture capital association(s) (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Association(s) for "impact investors" (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Where are the social enterprises that have been funded by your organization located, and of what profit/non-profit status are these enterprises? (Pick all that apply)

	United States	Foreign countries
Nonprofit social enterprises	<input type="checkbox"/>	<input type="checkbox"/>
For-profit social enterprises	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>

5. Please list the major social enterprises that your organization has funded in the last five years (or since its establishment), or provide the URL that lists those enterprises.

6. How often do you use each of the following funding instruments to fund social enterprises?

	Never	Rarely	Sometimes	Often	Always
Grants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equity through program-related investments (PRIs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Near-equity (e.g., convertible debt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loans through PRIs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part II: Staff and Leadership Team

7. How do you rate the (1) work experience and (2) educational training of **your leadership team collectively** (e.g., board, CEO, COO, CIO, CFO) in each of the following fields?

Leadership team's work experience in:	None	Very little	Some	Strong	Extremely strong
Philanthropy, nonprofit management, or public administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subject fields (e.g., environment, energy, health, arts, education, history)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leadership team's educational training in:	None	Very little	Some	Strong	Extremely strong
Philanthropy, nonprofit management, or public administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subject fields (e.g., environment, energy, health, arts, education, history)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How many staff members and volunteers does your organization currently have? Please enter a number for each below.

Full-time staff	_____	Internal board members (i.e., staff serving on board)	_____
Part-time staff	_____	External board members	_____
Volunteers (excluding board)	_____	Other (Please specify: _____)	_____

9. Please circle a number in the scale that best describes the orientation of your organization.

- Circle number "1" if the statement on the left-hand side of the scale best describes your reaction to the item.
- Circle number "7" if the statement on the right-hand side of the scale best describes your reaction to the item.
- Circle numbers "2" through "6" depending upon your best estimate of an intermediate position.

Statement on the left side more true	←	Equally true	→	Statement on the right side more true
1		2		3
4		5		6
7				

In general, the leadership of my organization favors:

A strong emphasis on maintaining tried-and-true funding programs or strategies	1	2	3	4	5	6	7	A strong emphasis on developing new funding programs or strategies
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How many new funding programs and strategies has your organization developed in the last five years (or since its establishment)?

No new funding programs or strategies	1	2	3	4	5	6	7	Many new funding programs or strategies
Changes in our funding programs or strategies have been mostly of a minor nature	1	2	3	4	5	6	7	Changes in our funding programs or strategies have been quite dramatic

In dealing with other funding organizations, my organization:

Typically responds to actions which other funding organizations initiate	1	2	3	4	5	6	7	Typically initiates actions to which other funding organizations then respond
Is very seldom the first organization to introduce new funding programs/ strategies, administrative techniques, operating technologies, etc.	1	2	3	4	5	6	7	Is very often the first organization to introduce new funding programs/ strategies, administrative techniques, operating technologies, etc.
Rarely makes changes, due to perceived changes occurring in the community we serve	1	2	3	4	5	6	7	Continuously makes changes, due to perceived changes occurring in the community we serve

In general, the leadership of my organization has:

A strong tendency to adopt low-risk projects (with expected normal and certain results)	1	2	3	4	5	6	7	A strong tendency to adopt high-risk projects (with chances of very dramatic results)
---	---	---	---	---	---	---	---	---

In general, the leadership of my organization believes that:

Owing to the nature of the environment, it is best to explore changes gradually via cautious, incremental behavior	1	2	3	4	5	6	7	Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the organization's objectives
--	---	---	---	---	---	---	---	--

When confronted with decision-making situations involving uncertainty, my organization:

Typically adopts a cautious, "wait-and-see" posture in order to minimize the probability of making costly decisions	1	2	3	4	5	6	7	Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities
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Part III: Funding Performance

This section asks about **social and financial performance indicators** you may use to assess your funding performance.

- The term **funding performance** is related to various criteria on **the status and outcomes of social enterprises** and the return and other benefits to a funding organization (i.e., your organization).
- The term **target beneficiary** refers to **individuals or groups served by a social enterprise** that your organization funds. These individuals or groups include those who might not be able to obtain necessary goods and services from mainstream providers, such as children, women, low-income or hard-to-employ populations, and environmentally-conscious clients.

10. Please indicate the **degree of importance** your organization attaches to each of the following funding performance criteria.

	Not important	Slightly important	Moderately important	Very important	Extremely important	Not Applicable
Meeting the needs of target beneficiaries (e.g., improved self-esteem of students)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The number of target beneficiaries served (e.g., students in attendance, individuals housed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concrete outputs for target beneficiaries (e.g., the number of jobs created, the number of meals provided)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scalability of funded programs to have social impact in other geographical areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advancement of the social cause by influencing policymakers and the public	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Possibility of long-term social impact by changing social systems and behaviors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alignment with your organization's social mission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Donor/investor satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total revenue of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earned income/sales revenue of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Philanthropic donation/grant revenue of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Growth in net assets of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acquisition of another institutional funder besides your organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Probability of social enterprises' initial public offering (IPO)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal rates of return (IRRs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct financial benefits for your organization or donors/investors (e.g., return on investment, tax break)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other social performance indicator/s (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other financial performance indicator/s (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Please indicate the extent to which your organization is **currently satisfied** with its funding performance on each of the following criteria.

	Not at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Extremely satisfied	Not applicable
Meeting the needs of target beneficiaries (e.g., improved self-esteem of students)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The number of target beneficiaries served (e.g., students in attendance, individuals housed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concrete outputs for target beneficiaries (e.g., the number of jobs created, the number of meals provided)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scalability of funded programs to have social impact in other geographical areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advancement of the social cause by influencing policymakers and the public	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Possibility of long-term social impact by changing social systems and behaviors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alignment with your organization's social mission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Donor/investor satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total revenue of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earned income/sales revenue of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Philanthropic donation/grant revenue of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Growth in net assets of social enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acquisition of another institutional funder besides your organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Probability of social enterprises' initial public offering (IPO)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal rates of return (IRRs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct financial benefits for your organization or donors/investors (e.g., return on investment, tax break)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other social performance indicator/s (Please specify:_____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other financial performance indicator/s (Please specify:_____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In the following two questions, the term **financial return** is not limited to the conventional meaning, i.e., the return on investment to your organization/investors. Instead, the term refers to **a variety of measurable financial consequences**, such as an improved ability of the social enterprise to attract future funding (as an organizational capacity).

12. In relation to the **performance focus of your organization**, please rate each statement on a 5-point scale ranging from "Strongly disagree" (1) to "Strongly agree" (5).

	Strongly disagree	←	→	Strongly agree	
Our organization is willing to give up some financial return if we have to, as social return is our primary concern	1	2	3	4	5
Our organization is willing to give up some social return if we have to, as financial return is our primary concern	1	2	3	4	5

13. To what extent do **your funders/investors** expect social and financial returns?

	Do not expect at all	Slightly expect	Moderately expect	Strongly expect	Very strongly expect
Social return	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial return	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part IV: Relationship with Social Enterprises

14. How often does your organization retain the right to **actively participate on the board** of social enterprises?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Always

15. How often does your organization **provide non-financial resources** (e.g., strategic advice about management or programs, IT, recruiting new management members) to social enterprises?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Always

Part V: Revenue and Other Financial Information

16. To what extent does your organization rely on each of the following revenue sources to support its operation?

	Does not rely at all	Slightly relies	Moderately relies	Strongly relies	Very strongly relies
Internal revenue (e.g., endowment interest, earned income)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Individual donors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Individual investors (for loans, equity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foundations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Banks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Venture capital firms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following data will be published only as the aggregated results from the survey.
Your organization's name will never be disclosed.

17. What were your organization's **total assets**, on average (i.e., on a per year basis), over the last three years?

- ☐ Less than \$1 million
- ☐ \$1 million to less than \$10 million
- ☐ \$10 million to \$1 billion
- ☐ Over \$1 billion

18. What was your organization's **operating budget**, on average (i.e., on a per year basis), over the last three years?

- ☐ Less than \$1 million
- ☐ \$1 million to less than \$5 million
- ☐ \$5 million to \$10 million
- ☐ Over \$10 million

19. What was the total **amount of funding** for your organization, on average (i.e., on a per year basis), over the last three years?

- ☐ Less than \$1 million
- ☐ \$1 million to less than \$10 million
- ☐ \$10 million to \$100 million
- ☐ Over \$100 million

Thank you for taking the time to complete this survey.

Appendix B:
Results of Regression Analysis: Effects on Venture Philanthropy Practices—Innovativeness Dimension

		Unstandardized Coefficients		Standardized Coefficients		<i>t</i> -statistics	Sig.	<i>R</i> ²	Adjusted <i>R</i> ²	ΔR^2	<i>F</i> -statistics
Variables		B	S.E.	Beta							
Base Model	(Constant)	1.64	.15		***	10.803	.000				63.752***
	Organization age	.00	.00	.01		.138	.891	.19	.19		
	Organization size ^a	.10	.02	.13	***	4.828	.000				
	The nonprofit status of funded social ventures	-.49	.05	-.25	***	-9.196	.000				
Main Effects Model	Innovativeness	.10	.02	.13	***	4.961	.000	.51	.51	.32	75.540***
	The nonprofit status	-.68	.10	-.23	***	-6.509	.000				
	Donor/investor demand for social outcomes	.05	.03	.05	†	1.660	.097				
	Donor/investor demand for financial outcomes	.20	.02	.29	***	10.227	.000				
	Affiliation with grantmaker professional associations	-.06	.02	-.09	**	-3.047	.002				
	Affiliation with venture capital professional associations	.20	.03	.25	***	8.232	.000				
	Management team's training in nonprofits	.03	.02	.05	†	1.776	.076				
	Management team's training in business	.05	.02	.08	**	3.178	.002				
	Innovativeness x the nonprofit status	.22	.07	.11	**	3.329	.001	.54	.53	.03	
Two-way Interaction Model	Innovativeness x donor/investor demand for social outcomes	-.01	.02	-.02		-.501	.616				60.407***
	Innovativeness x affiliation with grantmaker professional associations	-.07	.01	-.14	***	-5.372	.000				
	Innovativeness x management training in nonprofits	-.01	.01	-.03		-.803	.422				

n = 146 † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ^a Log-transformed

Dependent variable is venture philanthropy practices.

Regression weights shown are coefficients obtained at the full model (Model 3).

Appendix C:
Results of Regression Analysis: Effects on Venture Philanthropy Practices—Proactiveness Dimension

		Unstandardized Coefficients		Standardized Coefficients		<i>t</i> -statistics	Sig.	<i>R</i> ²	Adjusted <i>R</i> ²	ΔR^2	<i>F</i> -statistics
Variables		B	S.E.	Beta							
Base Model	(Constant)	1.53	.15		***	9.957	.000				
	Organization age	.00	.00	-.01		-.256	.798	.19	.19		63.752***
	Organization size ^a	.12	.02	.16	***	5.651	.000				
	The nonprofit status of funded social ventures	-.49	.05	-.25	***	-9.046	.000				
Main Effects Model	Proactiveness	.09	.03	.09	**	3.183	.002	.51	.50	.32	74.161***
	The nonprofit status	-.59	.11	-.20	***	-5.306	.000				
	Donor/investor demand for social outcomes	.06	.03	.06	†	1.846	.065				
	Donor/investor demand for financial outcomes	.21	.02	.30	***	10.230	.000				
	Affiliation with grantmaker professional associations	-.06	.02	-.10	**	-3.299	.001				
	Affiliation with venture capital professional associations	.21	.03	.26	***	8.458	.000				
	Management team's training in nonprofits	.03	.02	.05		1.623	.105				
	Management team's training in business	.06	.02	.11	***	4.266	.000				
	Proactiveness x the nonprofit status	.19	.10	.06	†	1.919	.055	.52	.51	.01	56.307***
Two-way Interaction Model	Proactiveness x donor/investor demand for social outcomes	-.04	.03	-.03		-1.156	.248				
	Proactiveness x affiliation with grantmaker professional associations	-.05	.02	-.08	**	-3.083	.002				
	Proactiveness x management training in nonprofits	-.03	.02	-.04		-1.649	.100				

n = 146 † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ^a Log-transformed

Dependent variable is venture philanthropy practices.

Regression weights shown are coefficients obtained at the full model (Model 3).

Appendix D:
Results of Regression Analysis: Effects on Venture philanthropy practices—Risk Taking Dimension

		Unstandardized Coefficients		Standardized Coefficients		<i>t</i> -statistics	Sig.	<i>R</i> ²	Adjusted <i>R</i> ²	ΔR^2	<i>F</i> -statistics
Variables		B	S.E.	Beta							
Base Model	(Constant)	1.40	.16		***	9.014	.000				
	Organization age	.00	.00	-.01		-.208	.835	.19	.19		63.752***
	Organization size ^a	.13	.02	.17	***	6.212	.000				
	The nonprofit status of funded social ventures	-.49	.06	-.25	***	-8.781	.000				
Main Effects Model	Risk-taking	-.001	.02	-.01		-.173	.863	.50	.50	.31	72.054***
	The nonprofit status	-.54	.11	-.18	***	-5.091	.000				
	Donor/investor demand for social outcomes	.06	.03	.06	†	1.860	.063				
	Donor/investor demand for financial outcomes	.21	.02	.30	***	10.191	.000				
	Affiliation with grantmaker professional associations	-.08	.02	-.12	***	-4.032	.000				
	Affiliation with venture capital professional associations	.25	.03	.31	***	10.022	.000				
	Management team's training in nonprofits	.04	.02	.07	*	2.325	.020				
	Management team's training in business	.06	.02	.11	***	4.226	.000				
Two-way Interaction Model	Risk-taking x the nonprofit status	-.17	.09	-.06	†	-1.822	.069	.51	.50	.01	53.724***
	Risk-taking x donor/investor demand for social outcomes	.05	.03	.06	*	2.024	.043				
	Risk-taking x affiliations with grantmaker professional associations	-.01	.02	-.01		-.469	.639				
	Risk-taking x management training in nonprofits	-.01	.02	-.01		-.411	.682				

n = 146 † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ^a Log-transformed
 Dependent variable is venture philanthropy practices.
 Regression weights shown are coefficients obtained at the full model (Model 3).

REFERENCES

- Abzug, R., & Mezas, S. J. (1993). The fragmented state and due process protections in organizations: The case of comparable worth. *Organization Science*, 4(3), 433–453. doi:10.1287/orsc.4.3.433
- Acumen Fund. (2013). Acumen is a Bold New Way of Tackling Poverty. *Acumen*. Retrieved May 14, 2013, from <http://acumen.org/>
- Agle, B. R., Mitchell, R. K., & Sonnenfeld, J. A. (1999). Who matters to CEOs?: An investigation of stakeholder attributes and salience, corporate performance, and CEO values. *The Academy of Management Journal*, 42(5), 507–525. doi:10.2307/256973
- Aguinis, H. (1995). Statistical power with moderated multiple regression in management research. *Journal of Management*, 21(6), 1141–1158. doi:10.1177/014920639502100607
- Aguinis, H., & Gottfredson, R. K. (2010). Best-practice recommendations for estimating interaction effects using moderated multiple regression. *Journal of Organizational Behavior*, 31(6), 776–786. doi:10.1002/job.686
- Ahlstrom, D., & Bruton, G. D. (2010a). Rapid institutional shifts and the co-evolution of entrepreneurial firms in transition economies. *Entrepreneurship Theory and Practice*, 34(3), 531–554. doi:10.1111/j.1540-6520.2010.00373.x
- Ahlstrom, D., & Bruton, G. D. (2010b). Rapid institutional shifts and the co-evolution of entrepreneurial firms in transition economies. *Entrepreneurship Theory and Practice*, 34(3), 531–554. doi:10.1111/j.1540-6520.2010.00373.x
- Ahlstrom, D., Bruton, G. D., & Yeh, K. S. (2008). Private firms in China: Building legitimacy in an emerging economy. *Journal of World Business*, 43(4), 385–399. doi:10.1016/j.jwb.2008.03.001
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.
- Aldrich, H. E., & Ruef, M. (2006). *Organizations evolving* (2nd ed.). London: Sage.
- Aldrich, H. E., & Zimmer, C. J. (1986a). Entrepreneurship through social networks. In D. L. Sexton & R. W. Smilor (Eds.), *The art and science of entrepreneurship* (pp. 3–23). New York, NY: Ballinger.
- Aldrich, H. E., & Zimmer, C. J. (1986b). Entrepreneurship through social networks. In H. E. Aldrich, E. R. Auster, U. H. Staber, & C. Zimmer (Eds.), *Population perspectives on organizations* (pp. 13–28). Uppsala: Distributed by Almqvist & Wicksell International.
- Alexander, R. A., & DeShon, R. P. (1994). Effect of error variance heterogeneity on the power of tests for regression slope differences. *Psychological Bulletin*, 115(2).
- Allison, P. D. (2001). *Missing data*. Thousand Oaks, CA: SAGE Publications.
- Alter, K. (2004). Social enterprise typology. *Virtue Venures LLC*. Retrieved from http://realworldbank.com/wp-content/uploads/2012/03/Social_Enterprise.pdf
- Anastasi, A., & Urbina, S. (1997). *Psychological testing* (7th ed.). New York, NY: Pearson.
- Anderson, B. S., Covin, J. G., & Slevin, D. P. (2009). Understanding the relationship between entrepreneurial orientation and strategic learning capability: an empirical

- investigation. *Strategic Entrepreneurship Journal*, 3(3), 218–240.
doi:10.1002/sej.72
- Ang, S., Slaughter, S., & Ng, K. Y. (2002). Human capital and institutional determinants of information technology compensation: Modeling multilevel and cross-level interactions. *Management Science*, 48(11), 1427–1445.
doi:10.1287/mnsc.48.11.1427.264
- Anheier, H. K., & Leat, D. (2006). *Creative philanthropy: Toward a new philanthropy for the twenty-first century*. New York: Routledge.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396–402. doi:10.2307/3150783
- Arnold, H. J. (1982). Moderator variables: A clarification of conceptual, analytic, and psychometric issues. *Organizational Behavior and Human Performance*, 29(2), 143–174. doi:10.1016/0030-5073(82)90254-9
- Arthurs, J. D., & Busenitz, L. W. (2003). The boundaries and limitations of agency theory and stewardship theory in the venture capitalist/entrepreneur relationship. *Entrepreneurship Theory and Practice*, 28(2), 145–162. doi:10.1046/j.1540-6520.2003.00036.x
- Arthurs, J. D., & Busenitz, L. W. (2006). Dynamic capabilities and venture performance: The effects of venture capitalists. *Journal of Business Venturing*, 21(2), 195–215. doi:10.1016/j.jbusvent.2005.04.004
- Austin, J. E. (2006). Three avenues for social entrepreneurship research. *Social entrepreneurship*, 22–33.
- Austin, J. E., Gutierrez, R., Ogliastri, E., & Reficco, E. (Eds.). (2006). *Effective management of social enterprises: lessons from businesses and civil society organizations in Iberoamerica*. Boston, MA: Harvard University David Rockefeller Center for Latin American Studies.
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship Theory and Practice*, 30(1), 1–22.
- Babbie, E. R. (1998). *The practice of social research*. Belmont, CA: Wadsworth Publishing.
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329–366. doi:10.2189/asqu.2005.50.3.329
- Barley, S. R., & Tolbert, P. S. (1997). Institutionalization and structuration: Studying the links between action and institution. *Organization Studies*, (18(1)), 93–117.
- Barman, E. (2007). An institutional approach to donor control: From dyadic ties to a field-level analysis. *American Journal of Sociology*, 112(5), 1416–1457. doi:10.1086/511802
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643–650. doi:10.1177/014920630102700602
- Barney, J. B., Busenitz, L., Fiet, J. O., & Moesel, D. (1989). The structure of venture capital governance: An organizational economic analysis of relations between venture capital firms and new ventures. *Academy of Management Proceedings*, 1989(1), 64–68. doi:10.5465/AMBPP.1989.4977947

- Barreto, I., & Baden-Fuller, C. (2006). To conform or to perform? Mimetic behaviour, legitimacy-based groups and performance consequences. *Journal of Management Studies*, 43(7), 1559–1581. doi:10.1111/j.1467-6486.2006.00620.x
- Barrett, G. V. (1972). Research models of the future for industrial and organizational psychology. *Personnel Psychology*, 25(1), 1–17. doi:10.1111/j.1744-6570.1972.tb01086.x
- Barrick, M. R., & Mount, M. K. (1993). Autonomy as a moderator of the relationships between the Big Five personality dimensions and job performance. *Journal of applied Psychology*, 78, 111–111.
- Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal*, 20(5), 421–444. doi:10.1002/(SICI)1097-0266(199905)20:5<421::AID-SMJ30>3.0.CO;2-O
- Basu, O. N., Dirsmith, M. W., & Gupta, P. P. (1999). The coupling of the symbolic and the technical in an institutionalized context: The negotiated order of the GAO's audit reporting process. *American Sociological Review*, 64(4), 506–526. doi:10.2307/2657253
- Battilana, J., & D'ahunno, T. (2009). Institutional work and the paradox of embedded agency. In T. B. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations* (pp. 31–58). Cambridge University Press.
- Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal*, 53(6), 1419–1440. doi:10.5465/AMJ.2010.57318391
- Battilana, J., Leca, B., & Boxenbaum, E. (2009). How actors change institutions: Towards a theory of institutional entrepreneurship. *Academy of Management Annals*, 3(1), 65–107. doi:10.1080/19416520903053598
- Baum, J. A. C., & Oliver, C. (1991). Institutional linkages and organizational mortality. *Administrative Science Quarterly*, 36(2), 187–218. Retrieved from <http://search.proquest.com.proxy2.ulib.iupui.edu/abicomplete/docview/203970029/abstract/133E6DBF1CA21EAC50B/1?accountid=7398>
- Baum, J. A. C., & Oliver, C. (1992). Institutional embeddedness and the dynamics of organizational populations. *American Sociological Review*, 57(4), 540–559. doi:10.2307/2096100
- Becherer, R. C., & Maurer, J. G. (1997). The moderating effect of environmental variables on the entrepreneurial and marketing orientation of entrepreneur-led firms. *Entrepreneurship Theory and Practice*, 22(1), 47–58.
- Berger, P. L., & Luckmann, T. (2011). *The social construction of reality: A treatise in the sociology of knowledge*. New York, NY: Open Road Media.
- Bhuian, S. N., Menguc, B., & Bell, S. J. (2005). Just entrepreneurial enough: The moderating effect of entrepreneurship on the relationship between market orientation and performance. *Journal of Business Research*, 58(1), 9–17. doi:10.1016/S0148-2963(03)00074-2
- Bielefeld, W. (2009). Issues in social enterprise and social entrepreneurship. *Journal of Public Affairs Education*, 15(1), 69–86. doi:10.2307/40215838

- Bill & Melinda Gates Foundation. (n.d.). How we make grants - Bill & Melinda Gates Foundation. Retrieved May 14, 2013, from <http://www.gatesfoundation.org/How-We-Work/General-Information/How-We-Make-Grants#OurApproachtoShapingFundingandManagingGrants>
- Bilodeau, M., & Slivinski, A. (1998). Rational nonprofit entrepreneurship. *Journal of Economics & Management Strategy*, 7(4), 551–571. doi:10.1111/j.1430-9134.1998.00551.x
- Birkinshaw, J. (1997). Entrepreneurship in multinational corporations: The characteristics of subsidiary initiatives. *Strategic management journal*, 18(3), 207–229.
- Birkinshaw, J. (1999). The determinants and consequences of subsidiary initiative in multinational corporations. *Entrepreneurship Theory and Practice*, 24(1), 9–36.
- Bishop, M., & Green, M. (2010). *Philanthrocapitalism: How giving can save the world*. New York, NY: Bloomsbury Publishing.
- Bobko, P. (1986). A solution to some dilemmas when testing hypotheses about ordinal interactions. *Journal of Applied Psychology*, 71(2), 323–326. doi:10.1037/0021-9010.71.2.323
- Bonini, S., & Emerson, J. (2005). *Maximizing blended value—building beyond the Blended Value Map to sustainable investing, philanthropy and organizations*. Found at www.blendedvalue.org/media/pdf-max-blendedvalue.pdf.
- Brainerd, P. (1999). Social Venture Partners: Engaging a new generation of givers. *Nonprofit and Voluntary Sector Quarterly*, 28(4), 502–507. doi:10.1177/0899764099284009
- Bridges, W. P., & Villemez, W. J. (1991). Employment Relations and the Labor Market: Integrating Institutional and Market Perspectives. *American Sociological Review*, 56(6), 748–764. doi:10.2307/2096253
- Brody, E. (2006). The legal framework for nonprofit organizations. In W. P. Powell & R. Steinberg (Eds.), *The nonprofit sector: a research handbook* (2nd ed., pp. 243–266). New Haven, CT: Yale University Press.
- Brown, E., & Slivinski, A. (2006). Nonprofit organizations and the market. In W. P. Powell & R. Steinberg (Eds.), *The nonprofit sector: a research handbook* (2nd ed., pp. 140–158). New Haven, CT: Yale University Press.
- Bruton, G. D., & Ahlstrom, D. (2003). An institutional view of China's venture capital industry: Explaining the differences between China and the West. *Journal of Business Venturing*, 18(2), 233–259. doi:10.1016/S0883-9026(02)00079-4
- Bruton, G. D., Ahlstrom, D., & Li, H. L. (2010). Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice*, 34(3), 421–440. doi:10.1111/j.1540-6520.2010.00390.x
- Bruton, G. D., Ahlstrom, D., & Obloj, K. (2008). Entrepreneurship in emerging economies: Where are we today and where should the research go in the future. *Entrepreneurship Theory and Practice*, 32(1), 1–14. doi:10.1111/j.1540-6520.2007.00213.x
- Bruton, G. D., Ahlstrom, D., & Singh, K. (2002). The impact of the institutional environment on the venture capital industry in Singapore. *Venture Capital*, 4(3), 197–218. doi:10.1080/13691060213712

- Bruton, G. D., Fried, V. H., & Manigart, S. (2005). Institutional influences on the worldwide expansion of venture capital. *Entrepreneurship Theory and Practice*, 29(6), 737–760. doi:10.1111/j.1540-6520.2005.00106.x
- Bugg-Levine, A., & Emerson, J. (2011). *Impact investing: Transforming how we make money while making a difference*. San Francisco: Jossey-Bass. Retrieved from <http://site.ebrary.com/id/10494625>
- Burlingame, D. F. (1993). Altruism and philanthropy. Indiana University Center on Philanthropy.
- Burns, L. R., & Wholey, D. R. (1993). Adoption and abandonment of matrix management programs: Effects of organizational characteristics and interorganizational networks. *Academy of Management Journal*, 36(1), 106–138. doi:10.2307/256514
- Burt, R. S. (2009). *Structural holes: The social structure of competition*. Boston, MA: Harvard University Press.
- Busenitz, L. W., Fiet, J. O., & Moesel, D. D. (2004). Reconsidering the venture capitalists' "value added" proposition: An interorganizational learning perspective. *Journal of Business Venturing*, 19(6), 787–807. doi:10.1016/j.jbusvent.2003.06.005
- Busenitz, L. W., Gómez, C., & Spencer, J. W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43(5), 994–1003. doi:10.2307/1556423
- Busenitz, L. W., West, G. P., Shepherd, D., Nelson, T., Chandler, G. N., & Zacharakis, A. (2003). Entrepreneurship research in emergence: Past trends and future directions. *Journal of Management*, 29(3), 285–308. doi:10.1016/S0149-2063_03_00013-8
- Cable, D. M., & Shane, S. (1997). A prisoner's dilemma approach to entrepreneur-venture capitalist relationships. *Academy of Management Review*, 22(1), 142–176. doi:10.2307/259227
- Cameron, K. (1978). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly*, 23(4), 604–632. doi:10.2307/2392582
- Caper, C., Collins, M., & Gooneratne, S. (1997). *Assessing venture philanthropy*. Boston, MA: Harvard Business School.
- Caruana, A., Ewing, M. T., & Ramaseshan. (2002). Effects of some environmental challenges and centralization on the entrepreneurial orientation and performance of public sector entities. *Service Industries Journal*, 22(2), 43–58. doi:10.1080/714005076
- Casile, M., & Davis-Blake, A. (2002). When accreditation standards change: Factors affecting differential responsiveness of public and private organizations. *Academy of Management Journal*, 45(1), 180–195. doi:10.2307/3069291
- Chakravarthy, B. S. (1986). Measuring strategic performance. *Strategic Management Journal*, 7(5), 437–458. doi:10.1002/smj.4250070505
- Chandler, G. N., & Hanks, S. H. (1998). An examination of the substitutability of founders human and financial capital in emerging business ventures. *Journal of Business Venturing*, 13(5), 353–369. doi:10.1016/S0883-9026(97)00034-7

- Chell, E. (2007). Social enterprise and entrepreneurship: Towards a convergent theory of the entrepreneurial process. *International Small Business Journal*, 25(1), 5–26. doi:10.1177/0266242607071779
- Chen, M.-J., & Hambrick, D. C. (1995). Speed, stealth, and selective attack: How small firms differ from large firms in competitive behavior. *Academy of Management Journal*, 38(2), 453–482. doi:10.2307/256688
- Chetkovich, C., & Frumkin, P. (2003). Balancing margin and mission: Nonprofit competition in charitable versus fee-based programs. *Administration & Society*, 35(5), 564–596. doi:10.1177/0095399703256162
- Child, J., Lu, Y., & Tsai, T. (2007). Institutional entrepreneurship in building an environmental protection system for the People's Republic of China. *Organization Studies*, 28(7), 1013–1034. doi:10.1177/0170840607078112
- Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73. doi:10.2307/3150876
- Clark, C. H., & Gaillard, J. T. (2003). *RISE capital market report: The double bottom line private equity landscape in 2002-2003*. New York, NY: Columbia Business School.
- Cochrane, J. H. (2005). The risk and return of venture capital. *Journal of Financial Economics*, 75(1), 3–52. doi:10.1016/j.jfineco.2004.03.006
- Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22(1), 29–49. doi:10.1016/j.jbusvent.2004.12.001
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: L. Erlbaum Associates.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Community Wealth Ventures, Inc. (2000). *Venture philanthropy 2000: Landscape and expectations*. Washington, DC: Venture Philanthropy Partners. Retrieved from <http://toolbelt.se-alliance.org/resources/393>
- Community Wealth Ventures, Inc. (2002). *Venture philanthropy 2002: Advancing nonprofit performance through high-engagement grantmaking*. Washington, DC: Venture Philanthropy Partners. Retrieved from <http://www.vpppartners.org/learning/reports/venture-philanthropy-2002-advancing-nonprofit-performance-through-high-engagement-g>
- Cools, E., & Vermeulen, S. (2008). *What's in a name? An inquiry on the cognitive and entrepreneurial profile of the social entrepreneur* (Vlerick Leuven Gent Management School Working Paper Series). Vlerick Leuven Gent Management School. Retrieved from <http://econpapers.repec.org/paper/vlgvlgwps/2008-02.htm>
- Coombes, S. M. T., Morris, M. H., Allen, J. A., & Webb, J. W. (2011). Behavioural orientations of non-profit boards as a factor in entrepreneurial performance: Does governance matter? *Journal of Management Studies*, 48(4), 829–856. doi:10.1111/j.1467-6486.2010.00956.x
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage Publications.

- Corporation for National and Community Service. (n.d.). Funded organizations. Retrieved June 25, 2013, from <http://www.nationalservice.gov/programs/social-innovation-fund/funded-organizations>
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98–104.
- Cortina, J. M., Chen, G., & Dunlap, W. P. (2001). Testing interaction effects in LISREL: Examination and illustration of available procedures. *Organizational Research Methods*, 4(4), 324–360. doi:10.1177/109442810144002
- Council on Foundations. (n.d.). About - Who we are. Retrieved June 15, 2013, from <http://www.cof.org/about/whoweare/index.cfm?navItemNumber=14848>
- Covaleski, M. A., & Dirsmith, M. W. (1988). An institutional perspective on the rise, social transformation, and fall of a university budget category. *Administrative Science Quarterly*, 33(4), 562–587. doi:10.2307/2392644
- Covin, J. G., & Covin, T. J. (1990). Competitive aggressiveness, environmental context, and small firm performance. *Entrepreneurship Theory and Practice*, 14(4), 35–50.
- Covin, J. G., Green, K. M., & Slevin, D. P. (2006). Strategic process effects on the entrepreneurial orientation–sales growth rate relationship. *Entrepreneurship Theory and Practice*, 30(1), 57–81. doi:10.1111/j.1540-6520.2006.00110.x
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice*, 35(5), 855–872. doi:10.1111/j.1540-6520.2011.00482.x
- Covin, J. G., & Slevin, D. P. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies*, 25(3), 217–234. doi:10.1111/j.1467-6486.1988.tb00033.x
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75–87. doi:10.1002/smj.4250100107
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice*, 16(1), 7–25.
- Covin, J. G., Slevin, D. P., & Schultz, R. L. (1994). Implementing strategic missions: Effective strategic, structural and tactical choices. *Journal of Management Studies*, 31(4), 481–506. doi:10.1111/j.1467-6486.1994.tb00627.x
- Covin, J. G., Slevin, D. P., & Schultz, R. L. (1997). Top management decision sharing and adherence to plans. *Journal of Business Research*, 40(1), 21–36. doi:10.1016/S0148-2963(96)00207-X
- Covin, J. G., & Wales, W. J. (2012). The measurement of entrepreneurial orientation. *Entrepreneurship Theory and Practice*, 36(4), 677–702. doi:10.1111/j.1540-6520.2010.00432.x
- Cronbach, L. J. (1987). Statistical tests for moderator variables: Flaws in analyses recently proposed. *Psychological Bulletin*, 102(3), 414–417.
- Cummings, T. G. (2007). Quest for an engaged academy. *Academy of Management Review*, 32(2), 355–360. doi:10.5465/AMR.2007.24349184
- Cutlip, S. M. (1965). *Fund raising in the United States: Its role in America's philanthropy*. Piscataway, NJ: Transaction Publishers.

- Dacin, M. T. (1997). Isomorphism in context: The power and prescription of institutional norms. *Academy of Management Journal*, 46–81.
- Dacin, M. T., Goodstein, J., & Scott, W. R. (2002). Institutional theory and institutional change: Introduction to the special research forum. *Academy of Management Journal*, 45(1), 43–56. doi:10.2307/3069284
- Dart, R. (2004a). The legitimacy of social enterprise. *Nonprofit Management and Leadership*, 14(4), 411–424. doi:10.1002/nml.43
- Dart, R. (2004b). Being “business-like” in a nonprofit organization: A grounded and inductive typology. *Nonprofit and Voluntary Sector Quarterly*, 33(2), 290–310. doi:10.1177/0899764004263522
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331. doi:10.1016/S0883-9026(02)00097-6
- Davis, J. A., Marino, L. D., Aaron, J. R., & Tolbert, C. L. (2011). An examination of entrepreneurial orientation, environmental scanning, and market strategies of nonprofit and for-profit nursing home administrators. *Nonprofit and Voluntary Sector Quarterly*, 40(1), 197–211. doi:10.1177/0899764009351112
- De Clercq, D., & Dimov, D. (2008). Internal knowledge development and external knowledge access in venture capital investment performance. *Journal of Management Studies*, 45(3), 585–612. doi:10.1111/j.1467-6486.2007.00747.x
- De Clercq, D., Dimov, D., & Thongpapanl, N. (2010). The moderating impact of internal social exchange processes on the entrepreneurial orientation–performance relationship. *Journal of Business Venturing*, 25(1), 87–103. doi:10.1016/j.jbusvent.2009.01.004
- De Clercq, D., & Sapienza, H. J. (2006). Effects of relational capital and commitment on venture capitalists’ perception of portfolio company performance. *Journal of Business Venturing*, 21(3), 326–347. doi:10.1016/j.jbusvent.2005.04.007
- Dean, T. J., & McMullen, J. S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22(1), 50–76. doi:10.1016/j.jbusvent.2005.09.003
- Deephouse, D. L. (1999). To be different, or to be the same? It’s a question (and theory) of strategic balance. *Strategic Management Journal*, 20(2), 147–166. doi:10.1002/(SICI)1097-0266(199902)20:2<147::AID-SMJ11>3.0.CO;2-Q
- Dees, J. G. (1998). The meaning of social entrepreneurship. *Comments and suggestions contributed from the Social Entrepreneurship Funders Working Group*, 6pp.
- Denzin, N. K. (2009). *The research act: A theoretical introduction to sociological methods*. Transaction Publishers.
- Dess, G. G., Lumpkin, G. T., & Covin, J. G. (1997). Entrepreneurial strategy making and firm performance: Tests of contingency and configurational models. *Strategic Management Journal*, 18(9), 677–695. doi:10.2307/3088133
- Di Domenico, M., Haugh, H., & Tracey, P. (2010). Social bricolage: Theorizing social value creation in social enterprises. *Entrepreneurship Theory and Practice*, 34(4), 681–703. doi:10.1111/j.1540-6520.2010.00370.x
- Dickson, P. H., & Weaver, K. M. (1997). Environmental determinants and individual-level moderators of alliance use. *Academy of Management Journal*, 40(2), 404–425. doi:10.2307/256888

- Dillman, D. A. (1991). The design and administration of mail surveys. *Annual Review of Sociology*, 17(1), 225–249. doi:10.1146/annurev.so.17.080191.001301
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: John Wiley & Sons.
- DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L. G. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment* (Vol. 1, pp. 3–22). Cambridge, MA: Ballinger.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. doi:10.2307/2095101
- DiMaggio, P. J., & Powell, W. W. (1991a). *The new institutionalism in organizational analysis*. Chicago, IL: University of Chicago Press.
- DiMaggio, P. J., & Powell, W. W. (1991b). Introduction. In P. J. DiMaggio & W. W. Powell (Eds.), *The new institutionalism in organizational analysis* (pp. 1–38). Chicago, IL: University of Chicago Press.
- Dimov, D. P., & Shepherd, D. A. (2005). Human capital theory and venture capital firms: Exploring “home runs” and “strike outs.” *Journal of Business Venturing*, 20(1), 1–21. doi:10.1016/j.jbusvent.2003.12.007
- Dimov, D., Shepherd, D. A., & Sutcliffe, K. M. (2007). Requisite expertise, firm reputation, and status in venture capital investment allocation decisions. *Journal of Business Venturing*, 22(4), 481–502. doi:10.1016/j.jbusvent.2006.05.001
- Dorado, S. (2005). Institutional entrepreneurship, partaking, and convening. *Organization Studies*, 26(3), 385–414. doi:10.1177/0170840605050873
- Duriau, V. J., Reger, R. K., & Pfarrer, M. D. (2007). A content analysis of the content analysis literature in organization studies: Research themes, data sources, and methodological refinements. *Organizational Research Methods*, 10(1), 5–34. doi:10.1177/1094428106289252
- Echols, A., & Tsai, W. (2005). Niche and performance: The moderating role of network embeddedness. *Strategic Management Journal*, 26(3), 219–238. doi:10.1002/smj.443
- Edelman, L. B. (1992). Legal ambiguity and symbolic structures: Organizational mediation of civil rights law. *American Journal of Sociology*, 97(6), 1531–1576. doi:10.2307/2781548
- Edwards, M. (2009). Why “philanthrocapitalism” is not the answer: Private initiatives and international development. In M. Kremer, P. V. Lieshout, & R. Went (Eds.), *Doing good or doing better: Development policies in a globalizing world* (pp. 237–254). Amsterdam, Nederland: Amsterdam University Press.
- Edwards, M. (2011). Impact, accountability, and philanthrocapitalism. *Society*, 48(5), 389–390. doi:10.1007/s12115-011-9467-y
- Eikenberry, A. M. (2006). Giving circles: Growing grassroots philanthropy. *Nonprofit and Voluntary Sector Quarterly*, 35(3), 517–532. doi:10.1177/0899764006287482
- Eikenberry, A. M., & Kluver, J. D. (2004). The marketization of the nonprofit sector: civil society at risk? *Public Administration Review*, 64(2), 132–140. doi:10.1111/j.1540-6210.2004.00355.x

- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32. doi:10.5465/AMJ.2007.24160888
- Eisenstadt, S. N. (1980). Cultural orientations, institutional entrepreneurs, and social change: comparative analysis of traditional civilizations. *American Journal of Sociology*, 85(4), 840–869. doi:10.2307/2778709
- Elsbach, K. D., & Sutton, R. I. (1992). Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories. *Academy of Management Journal*, 35(4), 699–738. doi:10.2307/256313
- Emerson, J. (1998). *The U.S. nonprofit capital market: An introductory overview of developmental stages, investors and funding instruments*. San Francisco, CA: REDF.
- Emerson, J. (2000). *The nature of returns: A social capital markets inquiry into elements of investment and the blended value proposition*. Boston, MA: Harvard Business School.
- Emerson, J. (2003). The blended value proposition: Integrating social and financial returns. *California Management Review*, 45(4), 35–51. doi:10.2307/41166187
- Emerson, J., Bonini, S., & Brehm, K. (2003). *The blended value map: Tracking the intersects and opportunities of economic, social and environmental value creation*. Palo Alto, CA: Skoll Foundation.
- Emerson, J., Spitzer, J., & Mulhair, G. (2006). Blended value investing: Capital opportunities for social and environmental impact. Presented at the World Economic Forum, Geneva, Switzerland.
- Emerson, J., Wachowicz, J., & Chun, S. (2000). Social return on investment: Exploring aspects of value creation in the nonprofit sector. In *The Box Set: Social Purpose Enterprises and Venture Philanthropy in the New Millennium* (Vol. 2, pp. 130–173). San Francisco, CA: The Roberts Foundation.
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36(3), 305–323. doi:10.1016/0749-5978(85)90002-0
- Federal Register. (n.d.). Examples of program-related investments. Retrieved June 22, 2013, from <https://www.federalregister.gov/articles/2012/04/19/2012-9468/examples-of-program-related-investments>
- Fichman, M., & Cummings, J. N. (2003). Multiple imputation for missing data: Making the most of what you know. *Organizational Research Methods*, 6(3), 282–308. doi:10.1177/1094428103255532
- Fleishman, J. L. (2009). *The foundation: A great American secret; how private wealth is changing the world*. New York, NY: Public Affairs.
- Fligstein, N. (1997). Social skill and institutional theory. *American Behavioral Scientist*, 40(4), 397–405. doi:10.1177/0002764297040004003
- Fligstein, N. (2001). Social skill and the theory of fields. *Sociological Theory*, 19(2), 105–125. doi:10.1111/0735-2751.00132
- Forbes, D. P. (1998). Measuring the unmeasurable: Empirical studies of nonprofit organization effectiveness from 1977 to 1997. *Nonprofit and Voluntary Sector Quarterly*, 27(2), 183–202. doi:10.1177/0899764098272005

- Forbes, K. F., & Zampelli, E. M. (2012). Volunteerism: The influences of social, religious, and human capital. *Nonprofit and Voluntary Sector Quarterly*. doi:10.1177/0899764012458542
- Foster, W., & Bradach, J. (2005). Should nonprofits seek profits. *Harvard business review*, 83(2), 92–100.
- Fried, V. H., & Hisrich, R. D. (1995). The venture capitalist: A relationship investor. *California Management Review*, 37(2), 101–113.
- Friedland, R., & Alford, R. R. (1991). The new institutionalism in organizational analysis. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 232–263). Chicago, IL: University of Chicago Press.
- Froelich, K. A., Knoepfle, T. W., & Pollak, T. H. (2000). Financial measures in nonprofit organization research: Comparing IRS 990 return and audited financial statement data. *Nonprofit and Voluntary Sector Quarterly*, 29(2), 232–254. doi:10.1177/0899764000292002
- Frumkin, P. (2003). Inside venture philanthropy. *Society*, 40(4), 7–15. doi:10.1007/s12115-003-1013-0
- Frumkin, P. (2008). *Strategic giving: The art and science of philanthropy*. Chicago, IL: University of Chicago Press.
- Galaskiewicz, J., & Bielefeld, W. (1998). *Nonprofit organizations in an age of uncertainty: A study of organizational change*. New York, NY: Aldine de Gruyter.
- Galaskiewicz, J., & Burt, R. S. (1991). Interorganization contagion in corporate philanthropy. *Administrative Science Quarterly*, 36(1), 88–105. doi:10.2307/2393431
- Gallagher, A. G., Ritter, E. M., & Satava, R. M. (2003). Fundamental principles of validation, and reliability: rigorous science for the assessment of surgical education and training. *Surgical Endoscopy And Other Interventional Techniques*, 17(10), 1525–1529. doi:10.1007/s00464-003-0035-4
- Garud, R., Hardy, C., & Maguire, S. (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies*, 28(7), 957–969. doi:10.1177/0170840607078958
- Garud, R., Jain, S., & Kumaraswamy, A. (2002). Institutional entrepreneurship in the sponsorship of common technological standards: The Case of Sun Microsystems and Java. *Academy of Management Journal*, 45(1), 196–214. doi:10.2307/3069292
- Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis* (Vol. 241). Berkeley: University of California Press.
- Giddens, A. (1984). *The constitution of society: Introduction of the theory of structuration*. University of California Press.
- Gimeno, J., Folta, T. B., Cooper, A. C., & Woo, C. Y. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 42(4), 750–783. doi:10.2307/2393656
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Transaction.

- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology*, 60(1), 549–576.
doi:10.1146/annurev.psych.58.110405.085530
- Graham, J. W., & Schafer, J. L. (1999). On the performance of multiple imputation for multivariate data with small sample size. *Statistical Strategies for Small Sample Research*, 50, 1–27.
- Granovetter, M. (1985). Economic action and social structure: the problem of embeddedness. *American journal of sociology*, 481–510.
- Green, K. M., Covin, J. G., & Slevin, D. P. (2008). Exploring the relationship between strategic reactivity and entrepreneurial orientation: The role of structure–style fit. *Journal of Business Venturing*, 23(3), 356–383.
doi:10.1016/j.jbusvent.2007.01.002
- Greenwood, R., & Hinings, C. R. (1993). Understanding strategic change: The contribution of archetypes. *Academy of Management Journal*, 36(5), 1052–1081.
doi:10.2307/256645
- Greenwood, R., & Hinings, C. R. (1996). Understanding radical organizational change: Bringing together the old and the new institutionalism. *Academy of Management Review*, 21(4), 1022–1054. doi:10.2307/259163
- Greenwood, R., & Suddaby, R. (2006). Institutional entrepreneurship in mature fields: The big five accounting firms. *Academy of Management Journal*, 49(1), 27–48.
doi:10.2307/20159744
- Greenwood, R., Suddaby, R., & Hinings, C. R. (2002). Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, 45(1), 58–80. doi:10.2307/3069285
- Grimes, M. (2010). Strategic sensemaking within funding relationships: The effects of performance measurement on organizational identity in the social sector. *Entrepreneurship Theory and Practice*, 34(4), 763–783. doi:10.1111/j.1540-6520.2010.00398.x
- Grønbjerg, K. A. (1993). *Understanding nonprofit funding: Managing revenues in social services and community development organizations*. Hoboken, NJ: Jossey-Bass.
- Grønbjerg, K. A., Martell, L., & Paarlberg, L. (2000). Philanthropic funding of human services: Solving ambiguity through the two-stage competitive process. *Nonprofit and Voluntary Sector Quarterly*, 29(suppl 1), 9–40.
doi:10.1177/089976400773746328
- Groves, R. M., & Peytcheva, E. (2008). The impact of nonresponse rates on nonresponse bias a meta-analysis. *Public Opinion Quarterly*, 72(2), 167–189.
doi:10.1093/poq/nfn011
- Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of management journal*, 85–112.
- Gulati, R., & Gargiulo, M. (1999). Where do interorganizational networks come from? *American journal of sociology*, 104(5), 1439–1493.
- Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. *Strategic Management Journal*, 21(3), 203. Retrieved from http://scholar.csom.umn.edu/azaheer/publications/strategic_networks.html

- Guler, I. (2007). Throwing good money after bad? Political and institutional influences on sequential decision making in the venture capital industry. *Administrative Science Quarterly*, 52(2), 248–285. doi:10.2189/asqu.52.2.248
- Guo, C., & Brown, W. A. (2006). Community foundation performance: Bridging community resources and needs. *Nonprofit and Voluntary Sector Quarterly*, 35(2), 267–287. doi:10.1177/0899764006287216
- Guo, C., Shockley, G., & Tang, R. (2009). At the intersection of two worlds: Religion, social enterprise, and partners in Christ International. *GIVING – International Journal on Philanthropy and Social Innovation*, 2, 71–82.
- Hager, M. A., Wilson, S., Pollak, T. H., & Rooney, P. M. (2003). Response rates for mail surveys of nonprofit organizations: A review and empirical test. *Nonprofit and Voluntary Sector Quarterly*, 32(2), 252–267. doi:10.1177/0899764003032002005
- Hair Jr, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis: With readings*. New York: Macmillan.
- Hajer, M. (2003). Policy without polity? Policy analysis and the institutional void. *Policy Sciences*, 36(2), 175–195. doi:10.1023/A:1024834510939
- Halfpenny, P. (1999). Economic and Sociological theories of individual charitable giving: Complementary or contradictory? *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 10(3), 197–215. doi:10.1023/A:1021200916487
- Hansmann, H. B. (1980). The role of nonprofit enterprise. *The Yale Law Journal*, 89(5), 835–901. doi:10.2307/796089
- Hardy, C., & Maguire, S. (2008). Institutional entrepreneurship. *The Sage handbook of organizational institutionalism*, 198–217.
- Haunschild, P. R. (1993). Interorganizational imitation: The impact of interlocks on corporate acquisition activity. *Administrative Science Quarterly*, 38(4), 564–592. doi:10.2307/2393337
- Healy, K. (2000). Embedded altruism: Blood collection regimes and the European Union's donor population. *American Journal of Sociology*, 105(6), 1633–1657. doi:10.1086/210468
- Healy, K. (2004). Altruism as an organizational problem: The case of organ procurement. *American Sociological Review*, 69(3), 387–404. doi:10.1177/000312240406900304
- Helm, S. T., & Andersson, F. O. (2010). Beyond taxonomy. *Nonprofit Management and Leadership*, 20(3), 259–276. doi:10.1002/nml.253
- Henderson, A. D. (1999). Firm strategy and age dependence: A contingent view of the liabilities of newness, adolescence, and obsolescence. *Administrative Science Quarterly*, 44(2), 281–314. doi:10.2307/2666997
- Herman, R. D., & Renz, D. O. (1999). Theses on nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 28(2), 107–126. doi:10.1177/0899764099282001
- Hess, F. M. (Ed.). (2005). *With the best of intentions: How philanthropy is reshaping K-12 education* (1st ed.). Boston, MA: Harvard Educational Publication Group.
- Heugens, P. P. M. A. R., & Lander, M. W. (2009). Structure! Agency! (And Other Quarrels): A meta-analysis of institutional theories of organization. *Academy of Management Journal*, 52(1), 61–85. doi:10.5465/AMJ.2009.36461835

- Hillman, A. J., & Wan, W. P. (2005). The determinants of MNE subsidiaries' political strategies: evidence of institutional duality. *Journal of International Business Studies*, 36(3), 322–340. doi:10.1057/palgrave.jibs.8400137
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967–988. doi:10.1177/014920639502100509
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1(1), 104–121. doi:10.1177/109442819800100106
- Hirsch, P. M. (1997). Sociology without social structure: Neoinstitutional theory meets brave new world. *American Journal of Sociology*, 102(6), 1702–1723. doi:10.1086/231132
- Hirsch, P. M., & Lounsbury, M. (1997). Ending the family quarrel toward a reconciliation of “old” and “new” institutionalisms. *American Behavioral Scientist*, 40(4), 406–418. doi:10.1177/0002764297040004004
- Hoffman, A. J. (1999). Institutional evolution and change: Environmentalism and the U.S. chemical industry. *Academy of Management Journal*, 42(4), 351–371. doi:10.2307/257008
- Holbrook, A. L., & Krosnick, J. A. (2010). Social desirability bias in voter turnout reports Tests using the item count technique. *Public Opinion Quarterly*, 74(1), 37–67. doi:10.1093/poq/nfp065
- Holm, P. (1995). The dynamics of institutionalization: Transformation processes in Norwegian Fisheries. *Administrative Science Quarterly*, 40(3), 398–422. doi:10.2307/2393791
- Honig, B., & Karlsson, T. (2004). Institutional forces and the written business plan. *Journal of Management*, 30(1), 29–48. doi:10.1016/j.jm.2002.11.002
- Hughes, M., & Morgan, R. E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36(5), 651–661. doi:10.1016/j.indmarman.2006.04.003
- Hwang, H., & Powell, W. W. (2005). Institutions and entrepreneurship. In S. A. Alvarez, R. Agarwal, & O. Sorenson (Eds.), *Handbook of Entrepreneurship Research* (pp. 201–232). Springer US. Retrieved from http://link.springer.com/chapter/10.1007/0-387-23622-8_10
- Idaszak, J. R., & Drasgow, F. (1987). A revision of the Job Diagnostic Survey: Elimination of a measurement artifact. *Journal of Applied Psychology*, 72(1), 69–74. doi:10.1037/0021-9010.72.1.69
- Internal Revenue Service. (2003, May 15). Section 2. Special features of IRC § 501(c)(3) organizations: 4.76.2.6 contributions and receipts. Retrieved from http://www.irs.gov/irm/part7/irm_07-025-003.html#d0e10
- Internal Revenue Service. (n.d.). Instructions for Form 990-PF (2012). Retrieved June 23, 2013, from <http://www.irs.gov/instructions/i990pf/ch02.html>
- Jaccard, J., & Turrisi, R. (2003). *Interaction effects in multiple regression* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

- Jackson, P. R., Wall, T. D., Martin, R., & Davids, K. (1993). New measures of job control, cognitive demand, and production responsibility. *Journal of Applied Psychology*, 78(5), 753–762. doi:10.1037/0021-9010.78.5.753
- James, C., & Marshall, P. (2006). Journeys in venture philanthropy and institution building. In W. V. B. Damon & S. Verducci (Eds.), *Taking philanthropy seriously: beyond noble intentions to responsible giving* (pp. 108–124). Bloomington, IN: Indiana University Press.
- Jegen, D. L. (1998). Community development venture capital: Creating a viable business model for the future. *Nonprofit Management and Leadership*, 9(2), 187–200. doi:10.1002/nml.9205
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4), 602–611. doi:10.2307/2392366
- John, R. (2006). *Venture philanthropy: The evolution of high engagement philanthropy in Europe*. Oxford, UK: Skoll Centre for Social Entrepreneurship Oxford Said Business School.
- Jones, M. B. (2007). The multiple sources of mission drift. *Nonprofit and Voluntary Sector Quarterly*, 36(2), 299–307. doi:10.1177/0899764007300385
- Jones, M. P. (1996). Indicator and stratification methods for missing explanatory variables in multiple linear regression. *Journal of the American Statistical Association*, 91(433), 222–230. doi:10.1080/01621459.1996.10476680
- Kanter, R., & Summers, D. V. (1987). Doing well while doing good: Dilemmas of performance measurement in nonprofit organizations and the need for a multiple-constituent approach. In W. P. Powell (Ed.), *The nonprofit sector: A research handbook* (1st ed., pp. 154–165). New Haven, CT: Yale University Press.
- Kaplan, R. S. (2001). Strategic performance measurement and management in nonprofit organizations. *Nonprofit Management and Leadership*, 11(3), 353–370. doi:10.1002/nml.11308
- Katz, S. N. (2005). What does it mean to say that philanthropy is “effective”? The philanthropists’ new clothes. *Proceedings of the American Philosophical Society*, 149(2), 123–131. doi:10.2307/4598921
- Keeter, S., Miller, C., Kohut, A., Groves, R. M., & Presser, S. (2000). Consequences of reducing nonresponse in a national telephone survey. *Public Opinion Quarterly*, 64(2), 125–148. doi:10.1086/317759
- Kendall, J., & Knapp, M. (2000). Measuring the performance of voluntary organizations. *Public Management: An International Journal of Research and Theory*, 2(1), 105–132. doi:10.1080/14719030000000006
- Kenney, M. (2000). *Understanding Silicon Valley: The anatomy of an entrepreneurial region*. Stanford, CA: Stanford University Press.
- Khan, F. R., Munir, K. A., & Willmott, H. (2007). A dark side of institutional entrepreneurship: Soccer balls, child labour and postcolonial impoverishment. *Organization Studies*, 28(7), 1055–1077. doi:10.1177/0170840607078114
- Kimberly, J. R. (1980). Initiation, innovation, and institutionalization in the creation process. In J. R. Kimberly & R. H. Miles (Eds.), *The organizational life cycle: Issues in the creation, transformation, and decline of organizations* (pp. 18–43). San Francisco, CA: Jossey-Bass.

- Kingma, B. R. (1995). Do profits “crowd out” donations, or vice versa? The impact of revenues from sales on donations to local chapters of the American Red Cross. *Nonprofit Management and Leadership*, 6(1), 21–38. doi:10.1002/nml.4130060104
- Kirkpatrick, I., & Ackroyd, S. (2003). Archetype theory and the changing professional organization: A critique and alternative. *Organization*, 10(4), 731–750. doi:10.1177/13505084030104005
- Kistruck, G. M., & Beamish, P. W. (2010). The interplay of form, structure, and embeddedness in social intrapreneurship. *Entrepreneurship Theory and Practice*, 34(4), 735–761. doi:10.1111/j.1540-6520.2010.00371.x
- Kostova, T., & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1), 215–233. doi:10.2307/3069293
- Kreiser, P. M. (2011). Entrepreneurial orientation and organizational learning: The impact of network range and network closure. *Entrepreneurship Theory and Practice*, 35(5), 1025–1050. doi:10.1111/j.1540-6520.2011.00449.x
- Kreiser, P. M., Marino, L. D., Dickson, P., & Weaver, K. M. (2010). Cultural influences on entrepreneurial orientation: The impact of national culture on risk taking and proactiveness in SMEs. *Entrepreneurship Theory and Practice*, 34(5), 959–983. doi:10.1111/j.1540-6520.2010.00396.x
- Krippendorff, K. (2004). Reliability in content analysis. *Human Communication Research*, 30(3), 411–433. doi:10.1111/j.1468-2958.2004.tb00738.x
- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology*. SAGE.
- Lampkin, L. M., & Boris, E. T. (2002). Nonprofit organization data what we have and what we need. *American Behavioral Scientist*, 45(11), 1675–1715. doi:10.1177/0002764202045011005
- Landerman, L. R., Land, K. C., & Pieper, C. F. (1997). An empirical evaluation of the predictive mean matching method for imputing missing values. *Sociological Methods & Research*, 26(1), 3–33. doi:10.1177/0049124197026001001
- Lawrence, T. B. (2004). Rituals and resistance: Membership dynamics in professional fields. *Human Relations*, 57(2), 115–143. doi:10.1177/0018726704042924
- Lawrence, T. B., & Phillips, N. (2004). From Moby Dick to Free Willy: Macro-cultural discourse and institutional entrepreneurship in emerging institutional fields. *Organization*, 11(5), 689–711. doi:10.1177/1350508404046457
- Leca, B., Battilana, J., & Boxenbaum, E. (2008). *Agency and institutions: A review of institutional entrepreneurship*. Boston, MA: Harvard Business School Publishing.
- Leca, B., & Naccache, P. (2006). A critical realist approach to institutional entrepreneurship. *Organization*, 13(5), 627–651. doi:10.1177/1350508406067007
- Lee, C., Lee, K., & Pennings, J. M. (2001). Internal capabilities, external networks, and performance: A study on technology-based ventures. *Strategic Management Journal*, 22(6-7), 615–640. doi:10.1002/smj.181
- Lee, L. T., & Sukoco, B. M. (2007). The effects of entrepreneurial orientation and knowledge management capability on organizational effectiveness in Taiwan: The moderating role of social capital. *International Journal of Management*, 24(3), 549.

- Lee, T. W. (1999). *Using qualitative methods in organizational research*. Thousand Oaks, CA: Sage Publications, Inc.
- Letts, C. W., Ryan, W., & Grossman, A. (1997). Virtuous capital: What foundations can learn from venture capitalists. *Harvard Business Review*, 75(2), 36–50.
- Lévi-Strauss, C. (1966). *Levi-Strauss/Weightman: Savage mind*. Chicago, IL: University of Chicago Press.
- Liao, J., Welsch, H., & Stoica, M. (2003). Organizational absorptive capacity and responsiveness: An empirical investigation of growth-oriented SMEs. *Entrepreneurship Theory and Practice*, 28(1), 63–85. doi:10.1111/1540-8520.00032
- Lissitz, R. W., & Green, S. B. (1975). Effect of the number of scale points on reliability: A Monte Carlo approach. *Journal of Applied Psychology*, 60(1), 10–13. doi:10.1037/h0076268
- Little, R. J. A. (1988). Missing-data adjustments in large surveys. *Journal of Business & Economic Statistics*, 6(3), 287–296. doi:10.1080/07350015.1988.10509663
- Little, R. J. A., & Rubin, D. B. (2002). *Statistical analysis with missing data* (2nd ed.). New York, NY: Wiley.
- Lounsbury, M. (2007). A tale of two cities: Competing logics and practice variation in the professionalizing of mutual funds. *Academy of Management Journal*, 50(2), 289–307. doi:10.5465/AMJ.2007.24634436
- Lounsbury, M., & Crumley, E. T. (2007). New practice creation: An institutional perspective on innovation. *Organization Studies*, 28(7), 993–1012. doi:10.1177/0170840607078111
- Lumpkin, G. T., & Dess, G. G. (1995). Simplicity as a strategy-making process: The effects of stage of organizational development and environment on performance. *Academy of Management Journal*, 38(5), 1386–1407. doi:10.2307/256862
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172. doi:10.2307/258632
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429–451. doi:10.1016/S0883-9026(00)00048-3
- Lyon, D. W., Lumpkin, G. T., & Dess, G. G. (2000). Enhancing entrepreneurial orientation research: Operationalizing and measuring a key strategic decision making process. *Journal of Management*, 26(5), 1055–1085. doi:10.1177/014920630002600503
- Maguire, S., Hardy, C., & Lawrence, T. B. (2004). Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal*, 47(5), 657–679. doi:10.2307/20159610
- Mair, J., & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44. doi:10.1016/j.jwb.2005.09.002
- Manolova, T. S., Eunni, R. V., & Gyoshev, B. S. (2008). Institutional environments for entrepreneurship: Evidence from emerging economies in Eastern Europe.

- Entrepreneurship Theory and Practice*, 32(1), 203–218. doi:10.1111/j.1540-6520.2007.00222.x
- Marquardt, D. W. (1980). Comment: You should standardize the predictor variables in your regression models. *Journal of the American Statistical Association*, 75(369), 87–91. doi:10.1080/01621459.1980.10477430
- Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research*. Thousand Oaks, CA: SAGE Publications.
- Mathieu, J. E., Aguinis, H., Culpepper, S. A., & Chen, G. (2012). Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling. *Journal of Applied Psychology*, 97(5), 951–966. doi:10.1037/a0028380
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114(2), 376–390. doi:10.1037/0033-2909.114.2.376
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363. doi:10.2307/2778293
- Meyskens, M., Robb-Post, C., Stamp, J. A., Carsrud, A. L., & Reynolds, P. D. (2010). Social ventures from a resource-based perspective: An exploratory study assessing Global Ashoka Fellows. *Entrepreneurship Theory and Practice*, 34(4), 661–680. doi:10.1111/j.1540-6520.2010.00389.x
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770–791. doi:10.2307/2630968
- Miller, D. (1995). Nonconformity in competitive repertoires. *Academy of Management Proceedings*, 1995(1), 256–260. doi:10.5465/AMBPP.1995.17536524
- Miller, D. (2011). Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and Practice*, 35(5), 873–894. doi:10.1111/j.1540-6520.2011.00457.x
- Miller, D., & Friesen, P. H. (1978). Archetypes of strategy formulation. *Management Science*, 24(9), 921–933. doi:10.2307/2630632
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1–25. doi:10.2307/2485899
- Miller, D., Lee, J., Chang, S., & Le Breton-Miller, I. (2009). Filling the institutional void: The social behavior and performance of family vs non-family technology firms in emerging markets. *Journal of International Business Studies*, 40(5), 802–817. doi:10.1057/jibs.2009.11
- Miller, D., & Toulouse, J.-M. (1986). Strategy, structure, CEO personality and performance in small firms. *American Journal of Small Business*, 10(3), 47–62.
- Miller, T. L., & Wesley, C. L. (2010). Assessing mission and resources for social change: An organizational identity perspective on social venture capitalists' decision criteria. *Entrepreneurship Theory and Practice*, 34(4), 705–733. doi:10.1111/j.1540-6520.2010.00388.x
- Mirabella, R. M. (2007). University-based educational programs in nonprofit management and philanthropic studies: A 10-year review and projections of future trends. *Nonprofit and Voluntary Sector Quarterly*, 36(4 suppl), 11S–27S. doi:10.1177/0899764007305051

- Mizruchi, M. S., & Fein, L. C. (1999). The social construction of organizational knowledge: A study of the uses of coercive, mimetic, and normative isomorphism. *Administrative Science Quarterly*, 44(4), 653–683. doi:10.2307/2667051
- Montgomery, K., & Oliver, A. L. (1996). Responses by professional organizations to multiple and ambiguous institutional environments: The case of AIDS. *Organization Studies*, 17(4), 649–671. doi:10.1177/017084069601700405
- Moody, M. (2008). “Building a culture”: The construction and evolution of venture philanthropy as a new organizational field. *Nonprofit and Voluntary Sector Quarterly*, 37(2), 324–352. doi:10.1177/0899764007310419
- Morino, M. (2005, January). Looking back, looking forward: Venture Philanthropy Partners. *Looking Back*. Retrieved June 22, 2013, from <http://www.vpppartners.org/learning/papers-and-perspectives/chairmans-corner/looking-back-looking-forward-0>
- Morris, M. H., Coombes, S., Schindehutte, M., & Allen, J. (2007). Antecedents and outcomes of entrepreneurial and market orientations in a non-profit context: Theoretical and empirical insights. *Journal of Leadership & Organizational Studies*, 13(4), 12–39. doi:10.1177/10717919070130040401
- Morris, M. H., & Jones, F. F. (1999). Entrepreneurship in established organizations: The case of the public sector. *Entrepreneurship Theory and Practice*, 24(1), 73–93.
- Morris, M. H., & Joyce, M. L. (1998). On the measurement of entrepreneurial behavior in not-for-profit organizations: Implications for social marketing. *Social Marketing Quarterly*, 4(4), 93–104. doi:10.1080/15245004.1998.9961027
- Morris, M. H., Webb, J. W., & Franklin, R. J. (2011). Understanding the manifestation of entrepreneurial orientation in the nonprofit context. *Entrepreneurship Theory and Practice*, 35(5), 947–971. doi:10.1111/j.1540-6520.2011.00453.x
- Mort, G. S., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: towards conceptualisation. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 76–88. doi:10.1002/nvsm.202
- Moss, T. W., Short, J. C., Payne, G. T., & Lumpkin, G. T. (2011). Dual identities in social ventures: An exploratory study. *Entrepreneurship Theory and Practice*, 35(4), 805–830. doi:10.1111/j.1540-6520.2010.00372.x
- Mutch, A. (2007). Reflexivity and the institutional entrepreneur: A historical exploration. *Organization Studies*, 28(7), 1123–1140. doi:10.1177/0170840607078118
- Muzyka, D., Birley, S., & Leleux, B. (1996). Trade-offs in the investment decisions of European venture capitalists. *Journal of Business Venturing*, 11(4), 273–287. doi:10.1016/0883-9026(95)00126-3
- Neter, J., Wasserman, W., & Kutner, M. H. (1985). *Applied linear statistical models: Regression, analysis of variance, and experimental designs*. Homewood, IL: Richard D. Irwin. Inc.
- Newsom, J. T., Prigerson, H. G., Schulz, R., & Reynolds, C. F. (2003). Investigating moderator hypotheses in aging research: Statistical, methodological, and conceptual difficulties with comparing separate regressions. *International Journal of Aging and Human Development*, 57(2), 119–150. doi:10.2190/13LV-B3MM-PEWJ-3P3W

- Nicholls, A. (2010). The Legitimacy of social entrepreneurship: Reflexive isomorphism in a pre-paradigmatic field. *Entrepreneurship Theory and Practice*, 34(4), 611–633. doi:10.1111/j.1540-6520.2010.00397.x
- Nicholson, L., & Anderson, A. R. (2005). News and nuances of the entrepreneurial myth and metaphor: Linguistic games in entrepreneurial sense-making and sense-giving. *Entrepreneurship Theory and Practice*, 29(2), 153–172. doi:10.1111/j.1540-6520.2005.00074.x
- North, D. C. (1990). *Institutions, institutional change and economic performance*. New York, NY: Cambridge University Press.
- North, D. C. (2005). Institutions and the process of economic change. *Management International*, 9(3), 1–7. Retrieved from <http://cat.inist.fr/?aModele=afficheN&cpsidt=16792383>
- Nunnally, J. C. (2010). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill Education.
- O'Donohoe, N., Leijonhufvud, C., Saltuk, Y., Bugg-Levine, A., & Brandenburg, M. (2010). *Impact investments: An emerging asset class*. New York, NY: J. P. Morgan.
- O'Neill, M. (2005). Developmental contexts of nonprofit management education. *Nonprofit Management and Leadership*, 16(1), 5–17. doi:10.1002/nml.87
- Okten, C., & Weisbrod, B. A. (2000). Determinants of donations in private nonprofit markets. *Journal of Public Economics*, 75(2), 255–272. doi:10.1016/S0047-2727(99)00066-3
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145–179. doi:10.5465/AMR.1991.4279002
- Oliver, C. (1992). The antecedents of deinstitutionalization. *Organization Studies*, 13(4), 563–588. doi:10.1177/017084069201300403
- Oliver, C. (1997a). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18(9), 697–713. doi:10.1002/(SICI)1097-0266(199710)18:9<697::AID-SMJ909>3.0.CO;2-C
- Oliver, C. (1997b). The influence of institutional and task environment relationships on organizational performance: The Canadian construction industry. *Journal of Management Studies*, 34(1), 99–124. doi:10.1111/1467-6486.00044
- Omidyar Network. (2013). Approach. Retrieved May 14, 2013, from <http://www.omidyar.com/approach>
- Orosz, J. J. (2000). *The insider's guide to grantmaking: How foundations find, fund, and manage effective programs*. San Francisco, CA: Jossey-Bass.
- Ostrander, S. A. (2007). The growth of donor control: Revisiting the social relations of philanthropy. *Nonprofit and Voluntary Sector Quarterly*, 36(2), 356–372. Retrieved from <http://nvs.sagepub.com/content/36/2/356>
- Ostrander, S. A., & Schervish, P. G. (1990). Giving and getting: Philanthropy as a social relation. In A. Walton & M. Gasman (Eds.), *Philanthropy, Volunteerism, and Fundraising* (pp. 67–98). Upper Saddle River, NJ: Pearson Publishing.
- Ostrower, F. (2006). Foundation approaches to effectiveness: A typology. *Nonprofit and Voluntary Sector Quarterly*, 35(3), 510–516. doi:10.1177/0899764006290789
- Parsons, T., & Jones, I. (1960). *Structure and process in modern societies* (Vol. 3). Free Press New York.

- Payton, R. L., & Moody, M. P. (2008). *Understanding philanthropy: Its meaning and mission*. Bloomington, IN: Indiana University Press.
- Pearce, J. A., Fritz, D. A., & Davis, P. S. (2010). Entrepreneurial orientation and the performance of religious congregations as predicted by Rational Choice Theory. *Entrepreneurship Theory and Practice*, 34(1), 219–248. doi:10.1111/j.1540-6520.2009.00315.x
- Pearce, J. A., Kramer, T. R., & Robbins, D. K. (1997). Effects of managers' entrepreneurial behavior on subordinates. *Journal of Business Venturing*, 12(2), 147–160. doi:10.1016/S0883-9026(96)00066-3
- Peng, M. W. (2004). Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, 25(5), 453–471. doi:10.1002/smj.390
- Peng, M. W., Yamakawa, Y., & Lee, S. (2010). Bankruptcy laws and entrepreneur friendliness. *Entrepreneurship Theory and Practice*, 34(3), 517–530. doi:10.1111/j.1540-6520.2009.00350.x
- Peredo, A. M., & Chrisman, J. J. (2006). Toward a theory of community-based enterprise. *Academy of Management Review*, 31(2), 309–328. doi:10.5465/AMR.2006.20208683
- Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41(1), 56–65. doi:10.1016/j.jwb.2005.10.007
- Perry, J. L. (1996). Measuring public service motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*, 6(1), 5–22. Retrieved from <http://jpart.oxfordjournals.org/content/6/1/5>
- Peter, J. P. (1979). Reliability: A review of psychometric basics and recent marketing practices. *Journal of Marketing Research*, 16(1), 6–17. doi:10.2307/3150868
- Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381–391. doi:10.2307/2489828
- Pfeffer, J., & Leong, A. (1977). Resource allocations in United Funds: Examination of power and dependence. *Social Forces*, 55(3), 775–790. doi:10.1093/sf/55.3.775
- Pfeffer, J. S., & Salancik, G. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper and Row.
- Powell, W. W. (1985). The institutionalization of rational organization. *Contemporary Sociology*, 14(5), 564–566. doi:10.2307/2069507
- Prewitt, K. (2006a). *The legitimacy of philanthropic foundations: United States and European perspectives*. New York, NY: Russell Sage Foundation.
- Prewitt, K. (2006b). Foundations. In W. P. Powell & R. Steinberg (Eds.), *The nonprofit sector: A research handbook* (2nd ed., pp. 355–377). New Haven, CT: Yale University Press.
- Rao, H., Davis, G. F., & Ward, A. (2000). Embeddedness, social identity and mobility: Why firms leave the NASDAQ and join the New York Stock Exchange. *Administrative Science Quarterly*, 45(2), 268–292. doi:10.2307/2667072
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761–787. doi:10.1111/j.1540-6520.2009.00308.x
- REDF. (n.d.-a). History. Retrieved June 22, 2013, from <http://www.redf.org/about-redf/history>

- REDF. (n.d.-b). How we invest. Retrieved May 14, 2013, from <http://www.redf.org/who-we-fund/how-we-invest>
- Richard, O. C., Barnett, T., Dwyer, S., & Chadwick, K. (2004). Cultural diversity in management, firm performance, and the moderating role of entrepreneurial orientation dimensions. *Academy of Management Journal*, 47(2), 255–266. doi:10.2307/20159576
- Rogelberg, S. G., & Stanton, J. M. (2007). Introduction understanding and dealing with organizational survey nonresponse. *Organizational Research Methods*, 10(2), 195–209. doi:10.1177/1094428106294693
- Rogers, E. M. (1995). *Diffusion of innovation* (4th ed.). New York, NY: Free Press.
- Rubin, D. B. (1976). Inference and missing data. *Biometrika*, 63(3), 581–592. doi:10.1093/biomet/63.3.581
- Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys*. New York, NY: Wiley.
- Rubin, D. B. (1996). Multiple imputation after 18+ years. *Journal of the American Statistical Association*, 91(434), 473–489. doi:10.1080/01621459.1996.10476908
- Ruef, M., & Scott, W. R. (1998). A multidimensional model of organizational legitimacy: Hospital survival in changing institutional environments. *Administrative Science Quarterly*, 43(4), 877–904. doi:10.2307/2393619
- Russell, C. J., & Bobko, P. (1992). Moderated regression analysis and Likert scales: Too coarse for comfort. *Journal of Applied Psychology*, 77(3), 336–342.
- Russell, C. J., Pinto, J. K., & Bobko, P. (1991). Appropriate moderated regression and inappropriate research strategy: A demonstration of information loss due to scale coarseness. *Applied Psychological Measurement*, 15(3), 257–266. doi:10.1177/014662169101500305
- Sahlman, W. A. (1990). The structure and governance of venture-capital organizations. *Journal of Financial Economics*, 27(2), 473–521. doi:10.1016/0304-405X(90)90065-8
- Salamon, L. M. (1987). Of market failure, voluntary failure, and third-party government: Toward a theory of government-nonprofit relations in the modern welfare state. *Nonprofit and Voluntary Sector Quarterly*, 16(1-2), 29–49. doi:10.1177/089976408701600104
- Salamon, L. M., & Abramson, A. J. (1982). *The federal budget and the nonprofit sector*. Washington, DC: Urban Institute Press.
- Sax, L. J., Gilmartin, S. K., & Bryant, A. N. (2003). Assessing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education*, 44(4), 409–432. doi:10.1023/A:1024232915870
- Scarlata, M., & Alemany, L. (2008). *Philanthropic venture capital: Can the key elements of venture capital be applied successfully to social enterprises?* (SSRN Scholarly Paper No. ID 1099277). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=1099277>
- Scarlata, M., & Alemany, L. (2010). *Deal structuring in philanthropic venture capital investments: financing instrument, valuation and covenants* (SSRN Scholarly Paper No. ID 1635307). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=1635307>

- Schafer, J. L. (2010). *Analysis of incomplete multivariate data*. London: Chapman & Hall/CRC.
- Schafer, Joseph L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147–177. doi:10.1037/1082-989X.7.2.147
- Schneiberg, M. (2005). Combining New Institutionalisms: Explaining Institutional Change in American Property Insurance. *Sociological Forum*, 20(1), 93–137. doi:10.1007/s11206-005-1899-y
- Schriesheim, C. A., & Hill, K. D. (1981). Controlling acquiescence response bias by item reversals: The effect on questionnaire validity. *Educational and Psychological Measurement*, 41(4), 1101–1114. doi:10.1177/001316448104100420
- Schriesheim, C. A., & Hinkin, T. R. (1990). Influence tactics used by subordinates: A theoretical and empirical analysis and refinement of the Kipnis, Schmidt, and Wilkinson subscales. *Journal of Applied Psychology*, 75(3), 246–257. doi:10.1037/0021-9010.75.3.246
- Schriesheim, C. A., Hinkin, T. R., & Podsakoff, P. M. (1991). Can ipsative and single-item measures produce erroneous results in field studies of French and Raven's (1959) five bases of power? An empirical investigation. *Journal of Applied Psychology*, 76(1), 106.
- Schütz, A. (1967). *The phenomenology of the social world*. Evanston, IL: Northwestern University Press.
- Schwab, D. P. (2004). *Research methods for organizational studies*. New York, NY: Psychology Press.
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493–511. doi:10.2307/2392880
- Scott, W. R. (2008a). *Institutions and organizations: Ideas and interests* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Scott, W. R. (2008b). Lords of the dance: Professionals as institutional agents. *Organization Studies*, 29(2), 219–238. doi:10.1177/0170840607088151
- Scott, W. R., Ruef, M., Mendel, P., & Caronna, C. A. (2000). *Institutional change and organizations: Transformation of a healthcare field*. Chicago, IL: University of Chicago.
- Selznick, P. (1949). *TVA and the grass roots: A study of politics and organization*. Los Angeles, CA: University of California Press.
- Selznick, P. (1957). *Leadership in Administration: A Sociological Interpretation*. Los Angeles, CA: University of California Press.
- Selznick, P. (1996). Institutionalism “old” and “new.” *Administrative Science Quarterly*, 41(2), 270–277. doi:10.2307/2393719
- Seo, M. G., & Creed, W. E. D. (2002). Institutional contradictions, praxis, and institutional change: A dialectical perspective. *The Academy of Management Review*, 27(2), 222–247. doi:10.2307/4134353
- Sewell, W. H. (1992). A theory of structure: Duality, agency, and transformation. *American Journal of Sociology*, 98(1), 1–29. doi:10.2307/2781191
- Shane, S., & Foo, M. (1999). New firm survival: Institutional explanations for new franchisor mortality. *Management Science*, 45(2), 142–159. doi:10.1287/mnsc.45.2.142

- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *The Academy of Management Review*, 25(1), 217–226. doi:10.2307/259271
- Sharma, S., Durand, R. M., & Gur-Arie, O. (1981). Identification and analysis of moderator variables. *Journal of Marketing Research*, 18(3), 291–300. doi:10.2307/3150970
- Shenhav, Y. (1995). From chaos to systems: The engineering foundations of organization theory, 1879-1932. *Administrative Science Quarterly*, 40(4), 557–585. doi:10.2307/2393754
- Shepherd, D. A. (1999). Venture capitalists' assessment of new venture survival. *Management Science*, 45(5), 621–632. doi:10.1287/mnsc.45.5.621
- Shepherd, D. A., Armstrong, M. J., & Lévesque, M. (2005). Allocation of attention within venture capital firms. *European Journal of Operational Research*, 163(2), 545–564. doi:10.1016/j.ejor.2003.11.006
- Shepherd, D. A., & Zacharakis, A. (1999). Conjoint analysis: A new methodological approach for researching the decision policies of venture capitalists. *Venture Capital*, 1(3), 197–217. doi:10.1080/136910699295866
- Shepherd, D. A., & Zacharakis, A. (2001). The venture capitalist-entrepreneur relationship: Control, trust and confidence in co-operative behaviour. *Venture Capital*, 3(2), 129–149. doi:10.1080/13691060110042763
- Shepherd, D. A., Zacharakis, A., & Baron, R. A. (2003). VCs' decision processes: Evidence suggesting more experience may not always be better. *Journal of Business Venturing*, 18(3), 381–401. doi:10.1016/S0883-9026(02)00099-X
- Sherer, P. D., & Lee, K. (2002). Institutional change in large law firms: A resource dependency and institutional perspective. *The Academy of Management Journal*, 45(1), 102–119. doi:10.2307/3069287
- Sherwood, A. L., & Covin, J. G. (2008). Knowledge acquisition in university–industry alliances: An empirical investigation from a learning theory perspective. *Journal of Product Innovation Management*, 25(2), 162–179. doi:10.1111/j.1540-5885.2008.00292.x
- Short, J. C., Moss, T. W., & Lumpkin, G. T. (2009). Research in social entrepreneurship: Past contributions and future opportunities. *Strategic Entrepreneurship Journal*, 3(2), 161–194. doi:10.1002/sej.69
- Sievers, B. (2001). If pigs had wings: The appeals and limits of venture philanthropy. In *Waldemar A. Nielsen Issues in Philanthropy Seminar*, Georgetown University.
- Simon, J., Dale, H., & Chisolm, L. (2006). The federal tax treatment of nonprofit organizations. In W. P. Powell & R. Steinberg (Eds.), *The nonprofit sector: a research handbook* (2nd ed., pp. 267–306). New Haven, CT: Yale University Press.
- Smart, D. T., & Conant, J. S. (2011). Entrepreneurial orientation, distinctive marketing competencies and organizational performance. *Journal of Applied Business Research (JABR)*, 10(3), 28–38. Retrieved from <http://www.journals.cluteonline.com/index.php/JABR/article/view/5921>
- Sokolowski, S. W. (1996). Show me the way to the next worthy deed: Towards a microstructural theory of volunteering and giving. *Voluntas: International*

- Journal of Voluntary and Nonprofit Organizations*, 7(3), 259–278.
doi:10.1007/BF02354118
- Stam, W., & Elfring, T. (2008). Entrepreneurial orientation and new venture performance: The moderating role of intra- and extraindustry social capital. *Academy of Management Journal*, 51(1), 97–111.
doi:10.5465/AMJ.2008.30744031
- Standlee, N. (2006). Old problems, new solutions: The creative impact of venture philanthropy. In W. V. B. Damon & S. Verducci (Eds.), *Taking philanthropy seriously: Beyond noble intentions to responsible giving* (pp. 205–221). Bloomington, IN: Indiana University Press.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610. doi:10.2307/258788
- Sutton, J. R., Dobbin, F., Meyer, J. W., & Scott, W. R. (1994). The legalization of the workplace. *American Journal of Sociology*, 944–971.
- Tang, J., Tang, Z., Marino, L. D., Zhang, Y., & Li, Q. (2008). Exploring an inverted U-shape relationship between entrepreneurial orientation and performance in Chinese ventures. *Entrepreneurship Theory and Practice*, 32(1), 219–239.
doi:10.1111/j.1540-6520.2007.00223.x
- Terborg, J. R. (1977). Women in management: A research review. *Journal of Applied Psychology*, 62(6), 647–664. doi:10.1037/0021-9010.62.6.647
- The Center on Philanthropy at Indiana University. (2012). *Giving USA 2012: The annual report on philanthropy for the Year 2011*. Chicago, IL: Giving USA Foundation.
- Tolbert, P. S., & Zucker, L. G. (1983). Institutional sources of change in the formal structure of organizations: The diffusion of Civil Service Reform, 1880-1935. *Administrative Science Quarterly*, 28(1), 22–39. doi:10.2307/2392383
- Tolbert, P. S., & Zucker, L. G. (1999). The institutionalization of institutional theory. In S. R. Clegg, C. Hardy, & W. Nord (Eds.), *Handbook of organization studies* (pp. 175–190). London: SAGE.
- Tomaskovic-Devey, D., Leiter, J., & Thompson, S. (1994). Organizational survey nonresponse. *Administrative Science Quarterly*, 39(3), 439–457.
doi:10.2307/2393298
- Townsend, D. M., & Hart, T. A. (2008). Perceived institutional ambiguity and the choice of organizational form in social entrepreneurial ventures. *Entrepreneurship Theory and Practice*, 32(4), 685–700. doi:10.1111/j.1540-6520.2008.00248.x
- Tracey, P., Phillips, N., & Jarvis, O. (2011). Bridging institutional entrepreneurship and the creation of new organizational forms: A multilevel model. *Organization Science*, 22(1), 60–80. doi:10.1287/orsc.1090.0522
- Tuckman, H. P. (1993). How and why nonprofit organizations obtain capital. In D. C. Hammack & D. R. Young (Eds.), *Nonprofit organizations in a market economy* (pp. 203–252). San Francisco, CA: Jossey-Bass.
- Tyebjee, T. T., & Bruno, A. V. (1984). A model of venture capitalist investment activity. *Management Science*, 30(9), 1051–1066. doi:10.1287/mnsc.30.9.1051
- Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, 61(4), 674–698. doi:10.2307/2096399

- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42(1), 35–67. doi:10.2307/2393808
- Uzzi, B. (2001). Social structure and competition in interfirm networks: The paradox of embeddedness. *The Sociology of Economic Life*, 207–238.
- Van Bruggen, G. H., Lilien, G. L., & Kacker, M. (2002). Informants in organizational marketing research: Why use multiple informants and how to aggregate responses. *Journal of Marketing Research*, 39(4), 469–478. doi:10.2307/1558558
- Van Slyke, D. M., & Newman, H. K. (2006). Venture philanthropy and social entrepreneurship in community redevelopment. *Nonprofit Management and Leadership*, 16(3), 345–368. doi:10.1002/nml.111
- Venkatraman, N. (1989). The concept of fit in strategy research: Toward verbal and statistical correspondence. *The Academy of Management Review*, 14(3), 423–444. doi:10.2307/258177
- Venture Philanthropy Partners. (n.d.). Approach: Venture Philanthropy Partners. Retrieved May 14, 2013, from <http://www.vppartners.org/about-us/approach>
- Vesterlund, L. (2006). Why do people give. *The nonprofit sector: A research handbook*, 2, 168–190.
- Wadsworth, H. C. (1975). Private foundations and the Tax Reform Act of 1969. *Law and Contemporary Problems*, 39(4), 255–262. doi:10.2307/1191173
- Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship Theory and Practice*, 32(4), 635–657. doi:10.1111/j.1540-6520.2008.00246.x
- Washington, M., & Ventresca, M. J. (2004). How organizations change: The role of institutional support mechanisms in the incorporation of higher education visibility strategies, 1874–1995. *Organization Science*, 15(1), 82–97. doi:10.1287/orsc.1030.0057
- Wasserman, N., & Robinson, R. (2000). *The venture capitalists as entrepreneurs*. Boston, MA: Harvard Business School Publishing.
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications* (Vol. xxxi). New York, NY: Cambridge University Press.
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. (2000). *Unobtrusive measures: Nonreactive research in the social sciences*. Thousand Oaks, CA: SAGE Publications.
- Wei-Skillern, J., Austin, J. E., Leonard, H., & Stevenson, H. (2007). *Entrepreneurship in the social sector*. Thousand Oaks, CA: SAGE.
- Weisbrod, B. A. (1975). Towards a theory of the voluntary nonprofit sector in a three sector economy. In E. S. Phelps (Ed.), *Altruism, morality and economic theory* (pp. 171–195). New York, NY: Russell Sage Foundation.
- Weisbrod, B. A. (1988). *The nonprofit economy*. Cambridge, MA: Harvard University Press.
- Weisbrod, B. A. (1998). *To profit or not to profit: The commercial transformation of the nonprofit sector*. New York, NY: Cambridge University Press.
- Weisbrod, B. A. (2004). The pitfalls of profits. *Stanford Social Innovation Review*, 2(3), 40–47. Retrieved from http://www.ssireview.org/blog/entry/the_pitfalls_of_profits/

- Werner, S., Praxedes, M., & Kim, H. (2007). The reporting of nonresponse analyses in survey research. *Organizational Research Methods*, 10(2), 287–295. doi:10.1177/1094428106292892
- Westphal, J. D. (1998). Board games: How CEOs adapt to increases in structural board independence from management. *Administrative Science Quarterly*, 43(3), 511–537. doi:10.2307/2393674
- Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/board power, demographic similarity, and new director selection. *Administrative Science Quarterly*, 40(1), 60–83. doi:10.2307/2393700
- Whetten, D. A. (1978). Coping with incompatible expectations: An integrated view of role conflict. *Administrative Science Quarterly*, 23(2), 254–271. doi:10.2307/2392564
- Whetten, D. A., & Mackey, A. (2002). A social actor conception of organizational identity and its implications for the study of organizational reputation. *Business & Society*, 41(4), 393–414. doi:10.1177/0007650302238775
- Whitman, J. R. (2008). Evaluating philanthropic foundations according to their social values. *Nonprofit Management and Leadership*, 18(4), 417–434. doi:10.1002/nml.196
- Wicks, D. (2001). Institutionalized mindsets of invulnerability: Differentiated institutional fields and the antecedents of organizational crisis. *Organization Studies*, 22(4), 659–692. doi:10.1177/0170840601224005
- Wijen, F., & Ansari, S. (2007). Overcoming inaction through collective institutional entrepreneurship: Insights from regime theory. *Organization Studies*, 28(7), 1079–1100. doi:10.1177/0170840607078115
- Wiklund, J. (1999). The sustainability of the entrepreneurial orientation-performance relationship. *Entrepreneurship Theory and Practice*, 24(1), 39–50.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal*, 24(13), 1307–1314. doi:10.2307/20060622
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20(1), 71–91. doi:10.1016/j.jbusvent.2004.01.001
- Williams, L. J., Edwards, J. R., & Vandenberg, R. J. (2003). Recent advances in causal modeling methods for organizational and management research. *Journal of Management*, 29(6), 903–936. doi:10.1016/S0149-2063_03_00084-9
- Wilson, J., & Musick, M. (1997). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62(5), 694–713. doi:10.2307/2657355
- Wolfe, A. (1998). What is altruism? *Private action and the public good*, 36–46.
- Wright, M., & Lockett, A. (2003). The structure and management of alliances: syndication in the venture capital industry. *Journal of Management Studies*, 40(8), 2073–2102. doi:10.1046/j.1467-6486.2003.00412.x
- Young, D. R. (Ed.). (2004). *Effective economic decision-making by nonprofit organizations*. New York: The Foundation Center.
- Young, D. R. (2006). Why study nonprofit finance? In D. R. Young (Ed.), *Financing nonprofits: Putting theory into practice* (pp. 3–20). Lanham, MD: AltaMira Press.

- Young, D. R. (Ed.). (2007). *Financing nonprofits: Putting theory into practice*. Lanham, MD: Rowman Altamira.
- Zacharakis, A. L., McMullen, J. S., & Shepherd, D. A. (2007). Venture capitalists' decision policies across three countries: An institutional theory perspective. *Journal of International Business Studies*, 38(5), 691–708. doi:10.1057/palgrave.jibs.8400291
- Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of Business Venturing*, 10(1), 43–58. doi:10.1016/0883-9026(94)00004-E
- Zahra, S. A., & Garvis, D. M. (2000). International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15(5–6), 469–492. doi:10.1016/S0883-9026(99)00036-1
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519–532. doi:10.1016/j.jbusvent.2008.04.007
- Zietlow, J. T. (2001). Social entrepreneurship: Managerial, finance and marketing aspects. *Journal of Nonprofit & Public Sector Marketing*, 9(1-2), 19–43. doi:10.1300/J054v09n01_03
- Zilber, T. B. (2002). Institutionalization as an interplay between actions, meanings, and actors: The case of a rape crisis center in Israel. *Academy of Management Journal*, 45(1), 234–254. doi:10.2307/3069294
- Zilber, T. B. (2007). Stories and the discursive dynamics of institutional entrepreneurship: The case of Israeli high-tech after the bubble. *Organization Studies*, 28(7), 1035–1054. doi:10.1177/0170840607078113
- Zucker, L. G. (1983). Organizations as institutions. In S. B. Bacharach (Ed.), *Research in the sociology of organizations* (pp. 1–47).
- Zucker, L. G. (1988). *Institutional patterns and organizations: Culture and environment*. Cambridge, MA: Ballinger.

CURRICULM VITAE

Tamaki Onishi

EDUCATION

Ph.D. 2013 INDIANA UNIVERSITY LILLY FAMILY SCHOOL OF
PHILANTHROPY, Philanthropic Studies

Minor: Organizational Theories and Entrepreneurship at Kelley School
of Business

Honors:

- Dickinson-Stone-Ilchman Fellowship, 2011–2012
- P.A. Mack and Tempel Dissertation Fellowship, 2009–2011
- Lumina Foundation Fellowship, 2009–2011
- Tobias Center for Leadership Excellence Doctoral Fellowship in
Indiana University Kelley School of Business, 2009–2010
- Cummins Foundation Fellowship, 2007–2008

Dissertation:

Institutional influence on the manifestation of entrepreneurial
orientation: A Case of social investment funders

Dissertation Committee:

Wolfgang Bielefeld (chair), Dwight Burlingame, Jeffrey Covin, Janet
Near (minor advisor)

M.A. 2000 COLUMBIA UNIVERSITY, TEACHERS COLLEGE, Arts Administration
Required coursework for Marketing and Nonprofit Finance from
Columbia Business School

Honors:

- Columbia University Teachers College Scholarship (via tuition
remission), 1999
- Morita Foundation Fellowship, 1997–1998

M.A. 1997 AICHI PREFECTURAL UNIVERSITY OF FINE ARTS AND MUSIC,
Japan, Musicology

Archival research conducted at University of Southern California,
Arnold Schoenberg Institute

Honor:

- Daiko Foundation Research Fellowship, 1996

B.A. 1991 TOKYO NATIONAL UNIVERSITY OF FINE ARTS AND MUSIC, Japan,
Musicology

EXPERIENCE

Academic Positions

- 2013–present Assistant Professor: Department of Political Science, Master of Public Affairs, University of North Carolina at Greensboro
- 2012–2013 Visiting Lecturer (one-year appointment): Department of Political Science, Master of Public Affairs, University of North Carolina at Greensboro
- Teaching the graduate courses for “Nonprofit Management and Leadership” (Fall), “Philanthropy & Resource Development” and “Social Entrepreneurship” (Spring) in both the classroom- and the online-formats
 - Coordinating the Nonprofit Management Certificate Program
- 2012 Summer Associate Faculty: Philanthropic Studies, The Center on Philanthropy Indiana University
- Taught the “Introduction to Philanthropy” (an undergraduate course via online)
 - The course and online format newly created with a grant of \$4,000
- 2010–2012 Associate Faculty: School of Public and Environmental Affairs, Indiana University Purdue University Indianapolis
- Taught the “Nonprofit and Voluntary Sector” (an undergraduate course at classroom/via online)
 - The online format newly created
- 2007–present Lecturer: Aichi Prefectural University of Fine Arts and Music Graduate School, Japan
- Teaching the “Fundraising for the Arts and Artists” (a graduate course at classroom/one-week intensive format)

Management Experiences in Nonprofits and Business

- 2006–2008 Project Director: “Youth Philanthropy in Japan and the United States” at the Center on Philanthropy at Indiana University
- 2004–2006 Visiting Researcher: “U.S.-Japan Comparative Study” at the Center on Philanthropy at Indiana University (an AFP funded international/diverse fundraising research project)
- 1999–2004 Major Gifts Development Associate: Thirteen/WNET New York, Patron Program
- 1998–1999 Corporate Funds and Sponsorship Intern: Carnegie Hall
- 1998 Finance Assistant: Orpheus Chamber Orchestra
- 1995–1997 Assistant Music Producer: Shirakawa Music Hall, Sumitomo Marine and Insurance Corporation, Japan
- 1991–1993 Communications and Human Resource Development Coordinator: Toyota Motor Corporation Headquarters, Toyota, Japan

PUBLICATIONS

Research Article in Peer-Reviewed Journals

Onishi, T. (2007). Japanese fundraising: A comparative study of the United States and Japan. *International Journal of Educational Advancement*, 7(3), 205–225.

Other Selected Research Papers

Onishi, T. (2011). Artists as entrepreneurs: A study on their fundraising and enterprise practices from a perspective of entrepreneurial orientation theory [in Japanese]. *Next Muses (Aichi Prefectural University of Fine Arts and Music Research Journal)* March 2011, 31-46.

Onishi, T. (2008). *Current conditions and development strategies of philanthropy and fundraising in Japan: A comparative study of the United States and Japan*. Washington, DC: Association of Fundraising Professionals.

Onishi, T. (2008). Fundraising vehicles and philanthropy: Charitable trusts in the United States [in Japanese]. *Trust Studies in Japan*, 29 (pp. 184–203). Tokyo: Trust Companies Association of Japan Research.

Onishi, T. (2007). Fundraising for the arts [in Japanese]. *Aichi Prefectural University of Fine Arts and Music Research Journal*, 1(2), 1–24.

Onishi, T. (2005). *Research on the current condition of nonprofit and non-governmental fundraising in Japan and suggestions for their fundraising development strategies* [in Japanese]. (Tokyo Foundation Rep. No. 2005–12). Tokyo: Tokyo Foundation.

Onishi, T. (2005). Fundraising and planned giving vehicles in the United States [in Japanese]. In the Center on Public Resource Development (Ed.), *Research on charitable vehicles developed through collaboration between NPOs and financial institutions* (pp. 87-128). Tokyo: Trust 21 Foundation.

Onishi, T. (2005). Volunteers' roles in philanthropy and fundraising [in Japanese]. *Japanese volunteer white paper 2005*, 149–158.

Chapters of Books and Encyclopedia

Onishi, T. (2012). "Fundraising". In N. Yamauchi, T. Tanaka & N. Okuyama (Eds.), *The encyclopedia of contemporary civil society* [in Japanese]. Center for Nonprofit Research & Information, Osaka, Japan: Osaka University.

Onishi, T. (2010). "Media and philanthropy". In H.K. Anheier & S. Toepler (Eds.), *International encyclopedia of civil society*. New York, NY: Springer.

Onishi, T. (2008). "Giving by corporations". *Giving USA 2008* (pp. 77–88). Glenview, IL: Giving USA Foundation.

Onishi, T. (2007). "Giving by corporations". *Giving USA 2007* (pp. 79–92). Glenview, IL: Giving USA Foundation.

PRESENTATIONS

Conference Papers and Presentations

Onishi, T. (2013). *Factors affecting venture philanthropy behavior: From the entrepreneurial orientation and institutional theory perspectives*. 2013 Academy of Management Meeting. Lake Buena Vista (Orlando), FL. August 2013.

Onishi, T., & Bielefeld, W. (2012). *Venture philanthropy revisited*. Association for Research on Nonprofit Organizations and Voluntary Action Conference. Indianapolis IN. November 2012.

Onishi, T., & Bielefeld, W. (2011). *Institutional influence on the manifestation of entrepreneurial orientation: The case of "impact investors."* Association for Research on Nonprofit Organizations and Voluntary Action Conference. Toronto, CANADA. November 2011.

Onishi, T. (2010). *A framework of strategic factors of venture philanthropy funds*. 2010 Academy of Management Meeting. Montreal, CANADA. August 2010.

Onishi, T., & Bielefeld, W. (2009). *The dynamics of capital markets for social enterprises: Social venture capital funds and factors affecting their funding decisions*. Association for Research on Nonprofit Organizations and Voluntary Action Conference. Cleveland, OH. November 2009.

Onishi, T. (2009). *Institutional influences on investment decision process of social venture capital funds*. AIM Alliance Nonprofit Data Conference. Cleveland, OH. November 2009.

Onishi, T. (2009). *Risk and return factors affecting investment in social enterprises and the role of social capital*. 2009 Academy of Management Meeting. Chicago, IL. August 2009.

Goldfalb, N., Huehls, F., & Onishi, T. (2008). *What counts? How does qualitative methodology affect research findings?* 2008 Association for Research on Nonprofit Organizations and Voluntary Action Conference. Atlanta, GA. November 2008.

Onishi, T. (2008). *A comparative study on fundraising between the United States and Japan*. The International Society for Third-Sector Research (ISTR) 8th International Conference. Barcelona, Spain. July 2008.

Onishi, T. (2007). *Toward typology of the capital market for social entrepreneurs: Overview of the state of research and theory implication*. 2007 Association for

Research on Nonprofit Organizations and Voluntary Action Conference. Atlanta, GA. November 2007.

Onishi, T., Wagner, L., & Williams, C. (2007). *Global fundraising: How does research affect practices?: A case study of fundraising in Japan*. 2007 Association for Research on Nonprofit Organizations and Voluntary Action Conference. Atlanta, GA. November 2007.

Onishi, T. (2005). *U.S.–Japan cross-cultural examination on development strategies for philanthropy and fundraising*. 2005 Association for Research on Nonprofit Organizations and Voluntary Action Conference. Washington D.C. November 2005.

Onishi, T. (2004). *Roles of professional and intermediary organizations in the development of U.S. fundraising*. Japan NPO Research Association Annual Conference. Yokohama, Japan. March 2004.

Onishi, T. (2001). *Strategic management by Carnegie Hall: Analysis on its efforts of marketing, fundraising, and programming*. Musicological Society of Japan 68th Conference. Nagoya, Japan. May 2001.

Major International Conferences Organized

Fundraising in the United States and its application to Japan. A series of forums and seminars on fundraising by Dwight F. Burlingame and Lilya Wagner, sponsored by the U.S. Embassy in Tokyo, U.S. Consulate in Osaka, and the Toyota Foundation. Tokyo and Osaka, Japan. September 4–7, 2006.

Fostering philanthropic mind. A series of forums and seminars by Dwight F. Burlingame and youth philanthropy workers from Learning to Give and Youth Philanthropy Initiative Indiana, sponsored by the Tokyo Foundation and United Way, Japan. Tokyo, Japan. February 11-15, 2005.

Invited Presentations and Lectures at Academic Institutions

Onishi, T. (2006). *Fundraising practices in the United States*. The Nonprofit & Public Management Program, Tokyo University, Japan. June 2006.

Onishi, T. (2004). *Educational programs for philanthropy and fundraising in the United States*. Center for the 21st Century Social Design at Rikkyo University Graduate School, Tokyo, Japan. March 2004.

RESEARCH GRANTS (SELECTED)

2012	The Center on Philanthropy Graduate Student Research Grant, \$2,000, for dissertation research
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- 2010–2012 William and Flora Hewlett Foundation, \$10,000, for research entitled “Dynamics of the Social Capital Markets” (Co-Principal Investigator with Wolfgang Bielefeld)
- 2009–2012 The Center on Philanthropy at Indiana University Research Department, \$5,000, for research entitled “Dynamics of the Social Capital Markets” (Co-Principal Investigator with Wolfgang Bielefeld)
- 2007–2008 Matsushita/Panasonic International Foundation Research Grant, JPY300,000 (\$3,271), for research entitled Japanese fundraising: A comparative study of the United States and Japan.
- 2007 Cosmo Oil Co. Grant, JPY500,000 (\$5,451), for research project entitled “Youth Philanthropy in Japan and the United States” (Co-Principal Investigator with Dwight Burlingame)
- 2006–2008 The Japan Foundation Center for Global Partnership Project Grant, \$150,000, for research project entitled “Youth Philanthropy in Japan and the United States” (Co-Principal Investigator with Dwight Burlingame)
- 2006 Trust Companies Association of Japan Research Award, JPY500,000 (\$5,451), for research entitled “Fundraising vehicles and philanthropy: Charitable trusts in the United States”
- 2006 Association of Fundraising Professionals (AFP) Research Grant (renewed), \$5,000
- 2005 Tokyo Foundation Research Grant, JPY1,500,000 (\$16,353), for research entitled “Research on the current condition of nonprofit and non-governmental fundraising in Japan and suggestions for their fundraising development strategies”
- 2005 Association of Fundraising Professionals (AFP) Research Grant, \$5,000, for research entitled “Current conditions and development strategies of philanthropy and fundraising in Japan: A comparative study of the United States and Japan”
- 2005 Ruth Lilly Archives Research Grant of the Center on Philanthropy at Indiana University, \$5,200, for research entitled “Japanese fundraising: A comparative study of the United States and Japan”

PROFESSIONAL ACTIVITIES

Services

Nonprofit Management Certificate Program coordinator, Master of Public Affairs,
University of North Carolina at Greensboro (2012–present)
Academic Program committee member, the Center on Philanthropy at Indiana University
Philanthropic Studies (2011–2012)

Affiliations

Member, Academy of Management
Member, Association for Research on Nonprofit Organizations and Voluntary Action
(ARNOVA)
Member, Japan NPO Research Association (*Nihon NPO Gakkai*)

Referee

Ad hoc reviewer for the Academy of Management Annual Meetings (2010, 2011, 2012)
Ad hoc reviewer for *The Foundation Review*
Ad hoc reviewer for *Nonprofit and Voluntary Sector Quarterly*

Consulting Services

- 2012 “Program Related Investment and Mission-Based Investment by Foundations,” a research project at the Center on Philanthropy at Indiana University
- Conduct research and provide strategic advice on key literature, research target and methodology.
- 2007 “Corporate Social Responsibility for Cummins Engine,” consulting work for Cummins Engine and Cummins Foundation, with Suzanne Weber Lupton.
- Conducted research on the principles, trends, and policies of CSR in the United States, EU, Africa, and Asia and made recommendations for Cummins’s new CSR programs; developed the Cummins Scorecards as the tools for the corporate managers to evaluate the effectiveness of Cummins’s CSR activities.

DISSEMINATION OF RESEARCH OUTSIDE THE SCIENTIFIC COMMUNITY (SELECTED)

Press Interviews and Articles

Wakisaka, N. (2007, June 2). Toward a philanthropy nation. *Asahi Shimbun*, p. A1.
(Featured interview).
Onishi, T. (2007, Summer). Youth philanthropy: U.S. model and development in Japan.
NPO Journal 2007, 18, 33-36.
Onishi, T. (2006). A comparative study on fundraising between the United States and Japan. *Japan NPO Research Association Newsletter*, 30(3).

- Onishi, T. (2006). Models and volunteer involvement of U.S. Fundraising. *NPO Journal* 2006, 12, 15-20.
- Onishi, T. (2005, Fall). Competition and collaboration between the nonprofits and business in the United States. *Kankyo Kaigi*, 61–65.
- Yamahata, Y. (2004, December 8). Japanese fundraisers. *Yomiuri Newspaper*, p. A4. (Featured interview).
- Onishi, T. (2003, November). To introduce philosophy of fundraising to Japan's civil society. *Fujin Koron*, 1141, 75. (Featured interview).
- Onishi, T. (2003). Fundraising practices by arts organizations in Japan. *Japan Council of Performers' Organizations Journal*, 13(1), 4–7.
- Onishi, T. (2003). About the American philanthropy. *Japan Initiative News*. No. 115.
- Onishi, T. (2002). A Report on international festival by MUSIC FROM JAPAN. *Ongaku no Tomo*, 60(4), 130–131.

Columns in Media

- “*Kaigai no Bunka* (Cultural Events Overseas: Classical Music)” in *Yomiuri Newspaper* (October 1998–present).
- “*Beikoku no Firansolopi* (Philanthropy in the United States)” in *Philanthropy*, monthly magazine published for Japanese corporations by the Japan Philanthropic Association. (November 2004–November 2005).

Invited Industry Presentations

- Onishi, T. (2007). *Fundraising: New trends in Japan and the United States*. A keynote speech at the Nippon Foundation, Tokyo, Japan. March 2007.
- Onishi, T. (2005). *U.S. fundraising strategies and development suggestion for Japan's nonprofit sector*. Tokyo Foundation Conference. Tokyo, Japan. April 2005.
- Onishi, T. (2004). *Fundraising practices and case studies in Japan*. Non-Profit Organization Support Center for NPO Program Development Management Seminar. Tokyo, Japan. December 2004.
- Onishi, T. (2004). *Fundraising and its roles in community development*. Aomori NPO Support Center Fundraising Seminar. Aomori, Japan. September 2004.
- Onishi, T. (2004). *The current condition and issues of U.S. fundraising*. The Isshinjuku Public Policy and Nonprofit Management Seminar. Tokyo, Japan. August 2004.